

①  
ROSSO

EUROPEAN UNIVERSITY INSTITUTE  
Department of Political and Social Sciences

STRATEGY AND SECURITY :

West German Doctrines and Their Predominance in  
the Evolution of the NATO Dual-Track Decision of 1979

Susanne Peters

Thesis submitted for assessment with a view to obtain the  
Degree of Doctor of the European University Institute  
Department of Political and Social Sciences  
Florence

Examining Jury

Ian Budge, University of Essex (supervisor)  
Klaus Jürgen Gantzel, Hamburg University (co-supervisor)  
Werner Maihofer, European University Institute  
Roger Morgan, European University Institute  
Dieter Senghaas, Bremen University

December 1989

LIB  
355  
.033543  
PET







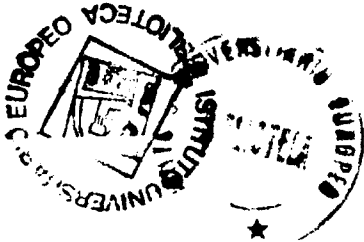




①  
R0390

LIB  
355.0335  
43 PET

EUROPEAN UNIVERSITY INSTITUTE  
Department of Political and Social Sciences



STRATEGY AND SECURITY :

West German Doctrines and Their Predominance in  
the Evolution of the NATO Dual-Track Decision of 1979

Susanne Peters

Thesis submitted for assessment with a view to obtain the  
Degree of Doctor of the European University Institute  
Department of Political and Social Sciences  
Florence

Examining Jury

Ian Budge, University of Essex (supervisor)  
Klaus Jürgen Gantzel, Hamburg University (co-supervisor)  
Werner Maihofer, European University Institute  
Roger Morgan, European University Institute  
Dieter Senghaas, Bremen University

December 1989

3550 33543  
355031



## *Strategy and Security:*

### *West German Doctrines and Their Predominance in the Evolution of the NATO Dual-Track Decision of 1979*

#### *1. Introduction*

|                                       |    |
|---------------------------------------|----|
| 1.1. Nature of the problem            | 1  |
| 1.2. State of the debate              | 5  |
| 1.3. Purpose and approach of research | 11 |
| 1.4. Organisation of thesis           | 24 |

#### *Sec. I: The contradictory nature of the strategy of Flexible Response*

#### *2. The evolution of Flexible Response*

|   |    |
|---|----|
| 2.1. The nature of nuclear deterrence                               | 29 |
| 2.2. Refinement of nuclear war-fighting deterrence                  | 34 |
| 2.2.1. Counterforce options as consistent elements in U.S. strategy | 34 |
| 2.2.2. The continuation in PD 59 and Discriminate Deterrence        | 41 |
| 2.2.3. Retreat from Massive Retaliation                             | 44 |
| 2.3. Consistent Problems in NATO's hardware decision                | 48 |
| 2.3.1. The introduction of TNF                                      | 48 |
| 2.3.2. The deployment of IRBMs in the 50s and 60s                   | 50 |
| 2.3.3. Parallels with the Plan for a Multilateral Force             | 52 |

#### *3. Flexible Response and its divergent U.S. and German Interpretation*

|   |    |
|---|----|
| 3.1. Description of flexible response                           | 58 |
| 3.2. Reactions in the Federal Republic                          | 61 |
| 3.2.1. German Parties   | 61 |
| 3.2.2. Institutionalising of research: the Ebenhausen Institute | 64 |

|  |    |
|--|----|
| 3.3. Divergent national doctrines                    | 67 |
| 3.3.1. Nuclear versus conventional                   | 67 |
| 3.3.2. Strategic versus tactical                     | 71 |
| 3.3.3. Political versus military use                 | 72 |
| 3.3.4. Two incompatible first use concepts           | 74 |
| 3.4. Ambiguity of flexible response: the TNF posture | 75 |
| 3.4.1. Description of the TNF                        | 75 |
| 3.4.2. Attempts of TNF's reduction                   | 78 |
| 3.5. German apprehensions concerning first use       | 81 |
| 3.5.1. Nuclear weapons' employment planning          | 82 |
| 3.5.2. The selective use of TNF                      | 84 |
| 3.5.3. Supersession of NATO's command system         | 86 |

**Sec. II. The NATO-Dual Track as a solution: the Federal Republic's role within its evolution**

**4. Evolution of the LRTNF Decision within NATO**

|  |     |
|--|-----|
| 4.1. Evolution of the LRTNF decision in Nuclear Planning Group | 94  |
| 4.1.1. Development of the Nuclear Planning Group               | 95  |
| 4.1.2. Provisional Political Guidelines (1967-1969)            | 96  |
| 4.1.3. Nuclear consultation procedures                         | 99  |
| 4.1.4. Schmidt's success with the ADMs                         | 101 |
| 4.1.5. Follow-on-use   | 103 |
| 4.1.6. German approval for military use                        | 105 |
| 4.2. Restructuring NATO's TNF                                  | 106 |
| 4.2.1. U.S. revision of TNF                                    | 107 |
| 4.2.2. New technological developments                          | 110 |
| 4.2.3. German revision of TNF                                  | 117 |

## **5. The LRTNF Decision as a result of U.S.-German Conflicts over SALT**

|   |     |
|---|-----|
| 5.1. Offer for an extension of the consultation process     | 121 |
| 5.2. The Federal Republic's interest in FBS in SALT I       | 124 |
| 5.2.1. Another cycle of concern about the U.S. guarantee    | 124 |
| 5.2.2. Political and strategical value of the FBS           | 126 |
| 5.2.3. Relationship to SALT negotiations                    | 129 |
| 5.3. Disagreement over Long-Range Cruise Missile in SALT II | 134 |
| 5.3.1. Development of the Cruise Missile                    | 135 |
| 5.3.2. The Ban on Cruise Missile                            | 137 |
| 5.3.3. German insistence on the Cruise Missile              | 141 |
| 5.3.4. Schmidt's public interference with the SALT process  | 144 |
| 5.3.5. Schmidt's strategic doctrine                         | 148 |

## **6. The Evolution of the Transatlantic Consensus**

|   |     |
|---|-----|
| 6.1. Shifting Policy of the U.S. Administration                   | 156 |
| 6.1.1. The Establishment of the High Level Group                  | 156 |
| 6.1.2. Transatlantic alliance of the Defence Secretaries deputies | 159 |
| 6.1.3. The neutron bomb debacle                                   | 163 |
| 6.1.4. Presidential Review Memorandum 38                          | 168 |
| 6.1.5. Euro-American workshop                                     | 170 |
| 6.1.6. The High Level Group's final report                        | 172 |
| 6.2. The Predominance of German Positions                         | 176 |
| 6.2.1. Non-singularity  | 176 |
| 6.2.2. Land-based option  | 179 |
| 6.2.3. Insistence on link to Arms Control                         | 185 |

## **Sec. III: The solution of the LRTNF modernisation: its possible employment options**

## **7. Compatible strategic doctrines and rationales**

|  |     |
|--|-----|
| 7.1. Key justification for the LRTNF Decision: the SS-20         | 191 |
| 7.2. LRTNF as a means for escalation control                     | 197 |
| 7.2.1. Compensation of the loss of escalation dominance          | 197 |
| 7.2.2. Assumptions implied in the acceptance of flexible options | 200 |

|   |     |
|---|-----|
| 7.2.3. Parallels between Deliberate Escalation and Escalation Control | 202 |
| 7.2.4. Dual Role of LRTNF   | 204 |
| 7.2.5. Compatibility through the Pershing's ambiguous data            | 206 |
| 7.3. Conclusion: Blurring of traditional categories                   | 209 |

## **8. The LRTNF decision as a result of U.S.-Doctrines:**

|   |     |
|---|-----|
| 8.1. Pershing II and Cruise Missiles:<br>Spearheads of a first strike strategy? | 213 |
| 8.1.1. The Political Background   | 213 |
| 8.1.2. Characteristics of First Strike  | 216 |
| 8.1.3. The Scenario of a Disarming First Strike                                 | 219 |
| 8.2. Schlesinger's doctrine of Limited Nuclear Options                          | 224 |
| 8.2.1. Description of the Counterforce Doctrine                                 | 226 |
| 8.2.2. Basic Features of the Limited Nuclear Options                            | 229 |
| 8.2.3. The role of the TNF in Schlesinger's doctrine                            | 232 |
| 8.3. LRTNF for follow-on use  | 238 |
| 8.3.1. Counterforce targeting   | 238 |
| 8.3.2. Criticism of the LRTNF   | 242 |
| 8.3.3. Intolerable degree of vulnerability                                      | 245 |

## **9. LRTNF decision as a result of German doctrines**

|  |     |
|--|-----|
| 9.1. Implementation of First Use Concept                         | 253 |
| 9.1.1. Rühl's discussion of the Schlesinger doctrine             | 253 |
| 9.1.2. Governmental Level  | 256 |
| 9.1.3. Theory of controlled nuclear strategic war                | 259 |
| 9.1.4. Pershing's employment options in German first use concept | 268 |
| 9.1.5. LRTNF as a means for first-and follow-on use              | 273 |
| 9.2. Predominance of German doctrines in the hardware decision   | 277 |
| 9.2.1. Prevalence of the Pershing's Extended Range               | 277 |
| 9.2.2. Land deployment versus sea deployment                     | 281 |
| 9.2.3. Vulnerability   | 285 |

## **10. Summary and Conclusions**

|   |     |
|---|-----|
| 10.1. Germany's Role in the Evolution of the LRTNF Decision | 289 |
| 10.2. Germany and the Implementation of the 1979 Decision   | 291 |
| 10.3. 1979 as Background to INF Treaty                      | 294 |

|                             |            |
|-----------------------------|------------|
| <b><i>Abbreviations</i></b> | <b>299</b> |
|-----------------------------|------------|

|                        |            |
|------------------------|------------|
| <b><i>Glossary</i></b> | <b>303</b> |
|------------------------|------------|

|   |            |
|---|------------|
| <b><i>Chronology of executives involved in the NATO-Dual Track Decision</i></b> | <b>309</b> |
|---|------------|

|                            |            |
|----------------------------|------------|
| <b><i>Bibliography</i></b> | <b>312</b> |
|----------------------------|------------|





## 1.Introduction

The thesis analyses the Federal Republic's motives for backing the NATO Dual-Track decision. The purposes are twofold: First, explanation will be given for the inconsistencies which are involved in the controversial and heatedly debated NATO-Dual Track decision by pointing to the Federal Republic's responsibility for its realisation. It will be brought out that during the seventies the Federal Republic opted for land-based intermediate-range theatre nuclear forces in NATO and requested the preservation of the option of long-range cruise missiles in the SALT consultations.

Secondly, in their adherence to flexible response German strategic doctrines will be presented basically as independent of party memberships and will be compared with U.S. strategic doctrines as a coherent and national entity. The contradictory nature of the strategy of flexible response will serve as a starting point for elaborating its divergent U.S. and German interpretations. The focus on German strategic doctrines shall serve to demonstrate that land-deployed long-range theatre nuclear weapons have been regarded as an optimal means for implementing the German interpretation of flexible response. As the methodological approach a documentary analysis has been chosen.

Generally, West German nuclear policy has been interpreted to a considerable extent as a reaction to U.S. hegemonic policy. This interpretation pattern will be drawn into question. The thesis wants to serve as a stimulus for further research to pay more attention to German contributions to NATO's decisions concerning nuclear issues than has been done so far.

### 1.1. The Nature of the Problem

On December 12, 1979 at a special meeting in Brussels NATO's Foreign and Defence Ministers agreed on the following decision:

"... Ministers have decided to modernise NATO's LRTNF by the deployment in Europe of U.S. ground-launched systems comprising 108 Pershing II launchers, which would replace existing U.S. Pershing I-A and 464 ground-launched cruise missiles (GLCM), all with single warheads."<sup>1</sup>

---

<sup>1</sup> "Communique issued at a special meeting of the NATO Foreign and Defense Ministers in Brussels on 12 December 1979" in John Cartwright, Julian Critchley,

The deployment of these 572 nuclear systems would be distributed among five European countries: all 108 Pershing II and 96 ground-launched cruise missiles would be deployed in the Federal Republic of Germany, 160 cruise missiles in the United Kingdom, 112 in Italy and 48 each in Belgium and the Netherlands. All systems would be under U.S. command and control.

At the same time, arms control negotiations on U.S. and Soviet long-range theatre nuclear systems were offered to the Soviet Union in order to achieve a "more stable overall nuclear balance at lower levels of nuclear weapons on both sides"<sup>2</sup>. This particular combination of two rather different elements became known as the famous "Dual-Track" decision.

Since the debate on general rearmament in West Germany in the early fifties and the concomitant deployment of tactical nuclear weapons with the Bundeswehr, no military decision had been discussed so vehemently and had caused such controversy in the Federal Republic.

The deployment of nuclear weapons on European soil capable of reaching Soviet territory within several minutes was criticised on many grounds. First of all the missiles were regarded as a new incentive to continue the arms race between the superpowers. Further criticism focused on the "decoupling" effects of the missiles by raising the notion of the increased probability of a limited nuclear war in Europe. It was suspected that the United States were casting Europe, and in particularly West Germany, for the role of battlefield of a future war by making the employment of U.S. strategic weapons for Europe's defence far less likely.

The NATO Communique indicated two rationales for the NATO Dual-Track decision: the Soviets' extensive deployment of the SS-20 and the necessity of concrete actions if NATO's strategy of flexible response were to remain credible. The main justification behind the decision, the imbalance of intermediate-range nuclear forces, generated by the Soviets' deployment of SS-20, raised some doubts. First, because the improvement from the Pershing 1A to Pershing II and the development of the cruise missile had been planned before

---

Cruise, Pershing and SS-20. The Search for Consensus: Nuclear Weapons in Europe (London etc.: A North Atlantic Assembly Report, Brassey's Defense Publishers, 1985) pp.151-153, here p.152

<sup>2</sup> ibid

NATO learned about the SS-20 and secondly, because the Western missiles were explicitly proclaimed not to be technically or quantitatively equivalent. A majority of the German peace movement as well as a part of the left wing of the German Social Democrats and the Green party interpreted the deployment of the U.S. missiles on European soil as an expression of a new U.S. strategy for fighting and winning a nuclear war. Since the Federal Republic was the only country which undertook deployment of the Pershing II, opponents of the deployment decision in the Federal Republic concentrated on an analysis of the implications of the Pershing's technical characteristics. With its accurate low-yield warhead and short pre-attack warning time, the Pershing II seemed to be the perfect means to implement the U.S. counterforce and countervailing strategy. Thus, the Pershing II and cruise missile were seen—at least by a part of the peace movement—as first, fully achieved elements of a U.S. first strike capability intended to disarm the Soviet Union.

Even if based on different assumptions and political goals, all these criticisms aimed at demonstrating one crucial point: whereas the deployment of long-range theatre nuclear missiles on European soil impaired Europe's security in an irresponsible fashion, it strengthened U.S. hegemony in the world by offering effective new military options.

Accordingly, the Federal Republic's compliance with the deployment part of the 1979 NATO Dual-Track decision was interpreted as a German appeasement policy toward the hegemony of the United States. This interpretation was based on the premise that the pattern of U.S. dominance in NATO and its competence in nuclear strategic decisions would remain unbroken. The Federal Republic's lack of sovereignty, its non-nuclear status and most of all its dependence on the U.S. nuclear umbrella supported interpretations of the West German, and in particular the Social-Liberal, defence policy of the seventies as being merely a submitting to or even anticipating U.S. requests, but not as representing an independent policy line. Although the Federal Republic gained considerable economic power during the 70s, its room for manoeuvre was generally regarded as being very narrow in the international field and in particular in disputes with the U.S. superpower concerning NATO issues.

However, the fact could not be ignored that it was the German Chancellor Schmidt who, with his famed October 1977 speech at the International Institute for Strategic Studies in London, provided the main legitimation for the

deployment of the missiles by pointing to the imbalance between the Soviet and U.S. intermediate-range nuclear forces. Schmidt's speech, together with several other indications that the Europeans had requested the deployment of long-range theatre nuclear weapons, was the first crucial hint that there were flaws in the interpretation of the missile issue on the part of missile opponents in the left-wing camp of the Federal Republic.

These analyses were further called in question when on December 8, 1987, almost exactly eight years after NATO's Dual-Track decision, the superpowers signed the INF treaty which envisages the scrapping of all the U.S. and Soviet land-based intermediate and shorter-range nuclear missiles. Also, even if one included the explanation that the treaty was due to Reagan's objective to crown the end of his office term with an arms control treaty, the question remains, why precisely those weapons which had only recently been produced<sup>3</sup> and which had been regarded as indispensable for the implementation of a new U.S. strategy were now to be sacrificed on the arms control altar. The ultimate and most evident indication that the interpretation of the missiles deployment as an expression of U.S. hegemonic power lacked plausibility is that it was precisely the government of the Federal Republic which tried, during the Summer of 1987, to hinder the accomplishment of the INF treaty by insisting on the maintenance of the Pershing 1-A missiles.

The present thesis aims to clarify these inconsistencies by focusing on the Federal Republic's motives for backing the 1979 NATO decision. The following question can be formulated: which were the political and strategic considerations that induced West German politicians to support the deployment of new long-range theatre nuclear forces (LRTNF) in the Federal Republic within the framework of the NATO Dual-Track decision? These inconsistencies will be explained by arguing that among the Federal Republic's strategic experts there was and remains a longstanding consensus that LRTNF deployed on European soil would be the best means to guarantee that the German interpretation of NATO flexible response strategy would prevail over the U.S. interpretation.

The analysis will focus on the contradictions produced by NATO's flexible response strategy and its resulting different interpretations. It will be argued

---

<sup>3</sup> The Pershing II had entered the production phase only in June 1982.

that there exist two, fundamentally incompatible, first use concepts within NATO: a German and a U.S. concept. Since for the Federal Republic any use of nuclear weapons implies intolerable damage, the Germans request a first use of nuclear weapons to be aimed at Soviet territory in order to signal to the Soviet Union the necessity for war termination. For the United States, however, flexible response would imply precisely the opposite: first use of nuclear weapons as late as possible and, to be employed in a geographically limited theatre. As a consequence, these different first use concepts led to different employment options which the United States and the Federal Republic assigned to the LRTNF: while the U.S. would envisage their follow-on use, the Federal Republic would preferably contemplate them for executing NATO's first use.

### 1.2. State of the debate

At the beginning of the eighties, the NATO Dual-Track decision was criticised extensively by peace researchers in the Federal Republic because of its destabilising effects on European security, and in particular for the dangers implied for the Federal Republic as a front-line state. The dispute on the merits of the new weapons provoked an enormous amount of analyses on the issue of the NATO Dual-Track decision. Thus there exist various explicit positions taken by previous writers concerning the leading question of the present thesis which have to be presented.

The effect of U.S. hegemony on the Federal Republic's security policy was a dominant interpretation pattern for answering the question who initiated the NATO-Dual track decision and why. This pattern of interpretation is based on the notion of the Federal Republic's total dependence on the U.S. nuclear umbrella and therefore on U.S. benevolence. It is usually invoked to explain why West German politicians had to yield to U.S. requests to deploy the missiles even if they were acting against their increasing conviction that the decision was wrong. In particular, in the beginning of the eighties German military journalists and left-wing Social Democratic politicians identified the United States as the ally who imposed the missiles on its European NATO partners.<sup>4</sup>

---

<sup>4</sup> Anton-Andreas Guha, journalist of the Frankfurter Rundschau, Der Tod in der Grauzone. Ist Europa noch zu verteidigen? (Frankfurt/M: Fischer Verlag)1980; Wilhelm Bittorf, journalist of Der Spiegel, Nachrüstung. Der Atomkrieg rückt näher, (Reinbek bei Hamburg: Spiegel-Buch, 1981); Wolf Perdelwitz / Heiner

Also the contrary interpretation of the LRTNF's deployment is possible: that the weapons are an expression of growing German or European economic and political power, quasi as a military equivalent to this gain of power.<sup>5</sup> However, since the Federal Government was opposed to shared control with regard to the Pershing II and the Ground-launched Cruise Missile, and in favour of exclusive U.S. control, this explanation will not be given further attention to in the present analysis.

The willingness of the European governments to deploy missiles on their soil can also be regarded as an act of "burdensharing". As a NATO ally, the Federal Republic has to share in the burden of defending the NATO area and especially of protecting the central front. Walter Süß contends that the aspect of the European governments' "burdensharing" has also to be considered in a broader context. For pursuing their geo-political interests in the Third World the Europeans are dependent on the United States. As a price for this they might have accepted the missiles' deployment on their soil:

"Dieser Service hat seinen Preis: Treue zur 'atlantischen Gemeinschaft', der Schutz des europäischen Frontabschnitts, die Übernahme von 'Verteidigungslasten'. Die Stationierung der neuen Mittelstreckenraketen ist ein Teil dieser Bündnisverpflichtungen."<sup>6</sup>

This explanation of the missiles' deployment as an act of burdensharing on the part of the Europeans is not based on the assumption that the Federal Republic is the "victim" and the United States is the "delinquent", and will therefore serve as one of the underlying hypotheses of the present thesis.

---

Bremer, journalists of Der Stern, Geisel Europa, (Berlin: Olle und Wolter 1981); and Peter Koch, journalist of Der Stern, Wahnsinn Rüstung. Ist der 3. Weltkrieg noch zu vermeiden? (Hamburg: Gruner + Jahr AG & Co, 1981); Erhard Eppler, Die tödliche Utopie der Sicherheit, (Reinbek bei Hamburg: Rowohlt, 1983)

<sup>5</sup> For this approach see Mohssen Massarrat, Kriegsgefahr und Friedensbewegung, (Kassel-Bettenhausen: Weber, Zucht & Co., 1984), p.37

<sup>6</sup> "This service has its price: loyalty to the 'Atlantic community', the protection of the European front sector, sharing the 'defence burden'. The deployment of the new intermediate-range weapons constitutes a part of these alliance duties." Walter Süß, "NATO und Warschauer Pakt zwischen 'Rüstungswahn' und Herrschaftskalkül - Überlegungen zu den 'Exterminismus'-Thesen Thompsons und Bahros" Prokla, Zeitschrift für politische Ökonomie und sozialistische Politik, (Vol.11, No.4,1981) pp.5-45, here p.20

Many analysts who searched for a coherent and compelling rationale for the deployment decision complained about the inconsistencies involved.<sup>7</sup> It was argued that the varied justifications of the NATO-Dual-Track decision cast "considerable doubt on the real purpose of the proposed deployment"<sup>8</sup> and that it "seemed to lack any operational rationale"<sup>9</sup>. Consequently, researchers identified the predominant rationale as being political rather than military.<sup>10</sup>

Correspondingly, the assumption was warranted that "the military and strategic aspects of the missile plan have been overlooked, both in official circles and in the public forum."<sup>11</sup> In this context psychological considerations such as the "moral question of solidarity of the Alliance"<sup>12</sup> and the demonstration of "organizing a positive Alliance decision"<sup>13</sup> were given attention to. While not denying that these reasons might be an important factor this approach does ignore the simple fact that NATO is also a military alliance

---

<sup>7</sup> "None of the principal military rationales NATO invoices publicly for deploying the GLCM (Ground Launched Cruise Missile, S.P.) and Pershing II can stand close scrutiny. None calls for weapons of their particular character or number." Leon V. Sigal, Nuclear Forces in Europe. Enduring dilemmas. Present prospects, (Washington D.C.: Brookings Institution, 1984), p.50

<sup>8</sup> McGeorge Bundy, George F. Kennan, Robert S. McNamara and Gerard Smith, "Nuclear Weapons and the Atlantic Alliance", Foreign Affairs Vol.60, No.4, (Spring 1982) p.753-768

<sup>9</sup> Stanley Hoffmann, "NATO and Nuclear Weapons: Reasons and Unreason", Foreign Affairs (1981/82), pp.327-346, p.332

<sup>10</sup> See Christopher J. Makins, "TNF Modernisation and 'Countervailing Strategy'", Survival Vol.23, No.4, (July/August 1981), pp.157-164

<sup>11</sup> Kevin Lewis N., "Intermediate-Range Nuclear Weapons" Scientific American, Vol.243, No.6 (December 1980) pp.41-51, here p.47. See also R. Jeffrey Smith, "Missile Deployments Roil Europe" Science, Vol.223 (January 27, 1984) pp.371-376

<sup>12</sup> "Die moralische Frage der Allianzsolidarität", Lothar Ruehl, "Der Beschluß der NATO zur Einführung nuklearer Mittelstreckenwaffen", Europa Archiv, No.4 (1980), pp.99-110, here p.104

<sup>13</sup> Garthoff, 1983, op.cit., p.197. The political context of the decision is discussed in detail by Christine Kolmar, Sicherheitspolitik und Öffentlichkeit. Eine Inhaltsanalyse am Beispiel der Berichterstattung über die Einführung neuer Mittelstreckenraketen (LRTNF) in Europa. Dissertation am Fachbereich Kommunikationswissenschaften der Freien Universität Berlin, 1982, p.65 and p.115. For another political interpretation of the NATO-Dual Track decision as an expression of German-U.S. divergences see Ernst-Otto Czempel, "Deutschland-USA: Kooperation und Irritationen" Außenpolitik, No.1 (1982), pp.14-29

and considers its task to be the effective preparation of the Western countries for the conduct of war.

Since the NATO-Dual Track decision is first of all a military hardware decision, attention should be given to its strategic involvements. The new weapons seemed to fit perfectly in the context of the U.S. counterforce and countervailing strategy, in particular as voiced in the Presidential Directive No.59. This assumption was also supported by the argument that the Pershing II and the cruise missile are first strike weapons and thus indispensable elements of a new U.S. strategy for fighting and winning a nuclear war against the Soviet Union on European soil. These arguments played a central role in the decisions within the peace movement and will be examined carefully in the present thesis.<sup>14</sup>

Meanwhile sufficient evidence has been given that also part of the German government pursued strategic interests by backing the deployment decision. Some analyses identify the Ministry of Foreign Affairs as the main promoter of the modernisation of the theatre nuclear weapons while downplaying the responsibility of the Ministry of Defence, which for the period involved is presented by the Social Democratic partner in the coalition government.<sup>15</sup> The Ministry of Defence in cooperation with the Chancellor is interpreted as having

---

<sup>14</sup> The researchers who are identified with these approaches will be introduced in chapter 8.1.

<sup>15</sup> Helga Haftendorn and Thomas Risse-Kappen introduced the first comprehensive analysis of the complex nature of the NATO Dual-Track decision on the basis of U.S. studies published by RAND analysts and U.S. participants in the decision-making process. See Helga Haftendorn, "Das doppelte Missverständnis. Zur Vorgeschichte des NATO-Doppelbeschlusses von 1979", Aus Politik und Zeitgeschichte, Vol.33, No.2, 1985, pp.244-287, here p.271; Thomas Risse-Kappen, "Fahrplan zur Abrüstung?" Zur INF-Politik der Bundesrepublik Deutschland 1970-1983 (Frankfurt am Main: Hessische Stiftung Friedens- und Konfliktforschung, January 1985). For the U.S. studies see Michael J. Legge, Theater Nuclear Weapons and the NATO Strategy of Flexible response, (Santa Monica, California: RAND Corporation, April 1983); Paul Buteux, The Politics of Nuclear Consultation in NATO 1965-1980, (Cambridge, London, New York, New Rochell, Melbourne, Sidney: Cambridge University Press) 1983; James A. Thomson, "The LRTNF decision: evolution of the US theater nuclear policy, 1975-79", International Affairs, Vol.60, No.4, (Fall 1984), pp.601-614; Raymond L. Garthoff, "The NATO Decision on Theater Nuclear Forces", Political Science Quarterly, Vol.98, No.2, (Summer 1983), pp.197-214; David N. Schwartz, NATO's Nuclear Dilemma, (Washington: Brookings Institution 1983); U.S. Congress: House of Representatives. The Modernisation of NATO's Long Range Theater Nuclear Forces. Report prepared for the Subcommittee on Europe and The Middle East by the Foreign Affairs and National Defense Division, Congressional Research Service, Library of Congress Washington D.C.: U.S.G.P.O., December 31, 1980; in the following: U.S. House of Representatives Report, Modernisation, 1980, op.cit.



put forward political arguments, in that they were only concerned to decrease the threat against Europe by incorporating the SS-20 into SALT-II. Especially Helmut Schmidt's motives for his October 1977 speech are interpreted in a very sympathetic way: as an attempt to achieve a reduction of the Soviet missiles.<sup>16</sup> Thus the German contribution to the NATO-Dual Track decision is narrowed down to the realisation of the arms control track of the NATO decision:

"In der Tat wäre der Dislozierungsteil des NATO-Beschlusses nicht ohne die amerikanischen Initiativen und den von Washington ausgeübten Druck zustande gekommen, ebenso wie freilich der spezifische Doppelbeschuß, d.h. die Ergänzung der Modernisierung durch neue Angebote zur Rüstungsbegrenzung, deutlich die Handschrift der Bundesregierung trug."<sup>17</sup>

Thomas Risse-Kappen chooses a broader approach and identifies five, partly incompatible objectives, which have been pursued by the German INF policy:

- military strategy: implementing flexible response to ensure escalation control;
- Alliance policy: strengthening of the U.S. nuclear guarantee for Western Europe given the 'codification' of strategic parity in SALT II;

---

<sup>16</sup> "Er (Helmut Schmidt, S.P.) hatte auf Rüstungskontrolle gesetzt, aus der - einmal mehr - Aufrüstung werden wird. Die Dinge aus der Hand gleiten lassen zu haben werden Historiker einst als das schwerwiegendste Versäumnis seiner Kanzlerschaft ausmachen, das gerade ihm, dem an strategischem Horizont auf der Bonner Bühne niemand das Wasser reicht, nicht unterlaufen durfte." (Translation of this quotation: "He (Helmut Schmidt, S.P.) had gone for arms control, which turns - once again - into armament. As the most significant error of his chancellorship, historians will point out that he let the leadership slip from his hands - which should not have happened to him, this man to whom nobody on the strategic horizon of the Bonn stage can hold a candle.") Reinhard Mutz, "Das Sicherheitsproblem der Bundesrepublik und die Bundesrepublik als Sicherheitsproblem" in Wolf-Dieter Eberwein and Catherine M. Kelleher, Sicherheit zu welchem Preis? Die Zukunft der westlichen Allianz. (München-Wien: Günter Olzog Verlag, 1983) pp.75-102, here p.101. See also Hartmut Soell, "Sich barfuß in die Tür der Weltpolitik klemmen?" Frankfurter Allgemeine Zeitung (November 12, 1983) p.10 This argument was also used by academics: Ekkehart Krippendorff contended that the United States became the driving force in this issue and made the Federal SPD government look like the magicians's apprentice who could not get rid of the ghosts they had called. "Die Friedensbewegung kann nicht Friedensbewegung bleiben - oder sie ist auch das nicht mehr", in Ulrich Albrecht et.al., Stationierung - und was dann? Friedensbewegung gegen Apokalypse. (Berlin 1983) pp.122-129, here p.122. See also Hans Günter Brauch, Die Raketen kommen! Vom NATO-Doppelbeschuß bis zur Stationierung (Köln: Bund Verlag, 1983) p.22

<sup>17</sup> "Indeed the deployment part of the NATO Dual-Track decision would not have been accomplished without U.S. initiatives and the pressure exerted from Washington. At the same time the Dual-Track, i.e. the completion of the modernisation with new offers for arms control, would not have been accomplished without the Federal Republic." Haftendorn, 1985, op.cit., p.279, emphasis in the text

- defensive motives: reacting against the threat posed by the SS-20;
- arms control: including intermediate range weapons in the East-West arms control process;
- detente policy: complementing political detente in the military area;
- domestic policy: justifying a modernisation decision by the simultaneous offer to negotiate."<sup>18</sup>

In the second half of the 80s several books were published which placed considerable emphasis on the Federal Republic's part in the decision-making process. While openly welcoming the LRTNF as being strategically advantageous for the Federal Republic, they interpret the German government as actually demanding the LRTNF from the U.S.<sup>19</sup>

Lothar Rühl's analysis is the first comprehensive and detailed presentation of the West German politicians' policy line in the nuclear field. Until January 1989 Lothar Rühl was State Secretary in the Ministry of Defence. His book was therefore written while he held his office and reveals considerable insider knowledge. As with Hoffmann, Rühl's ulterior motive is obviously to support the tendencies among West German politicians to continue their active participation in the nuclear field. His book describes the evolution of the NATO Dual-Track decision as being the result of a consistent policy following a German military rationale and which is supported by a broad consensus derived from the doctrines of the relevant persons involved in the decision. Rühl and Hoffmann, however, downplay and even ignore U.S. strategic defence policy and the role of the U.S. superpower.<sup>20</sup>

---

<sup>18</sup> Thomas Risse-Kappen, The Zero Option, INF, West Germany, and Arms Control, (Boulder and London: Westview Press, 1988) p.57, emphasis in the text

<sup>19</sup> Hubertus Hoffmann, Die Atompartner Washington - Bonn und die Modernisierung der taktischen Kernwaffen. Vorgeschichte und Management der Neutronenwaffe und des Doppelbeschlusses der NATO, (Koblenz, Bernard & Graefe: 1986); Lothar Rühl, Mittelstreckenwaffen in Europa: Ihre Bedeutung in Strategie, Rüstungskontrolle und Bündnispolitik (Baden-Baden: Nomos Verlag, 1987) Hubertus Hoffmann's title "The nuclear Partners Washington-Bonn and the Modernisation of the Tactical Nuclear Weapons" expresses the book's position that the Federal Republic should become aware of its strength in the nuclear field. In particular the years 1969-1974 of Willy Brandt's chancellorship are interpreted as a phase of "nuclear agony" which changed dramatically when Helmut Schmidt who is interpreted as the father of the nuclear awakening of the Federal Republic took over, see p.488

<sup>20</sup> An analysis with the same emphasis on the Federal Republic's part in the decision making process without ignoring that the LRTNF are also a product of doctrinal

The thesis will consider both U.S. and German strategic interests and activities to explain the inconsistencies of the NATO Dual-Track decision.<sup>21</sup>

### 1.3. Approach and purpose of research

The strategic doctrines of West German and U.S. decision makers will be clarified in a documentary analysis. These strategic doctrines to be analysed are part of a complex of security policy doctrines, various components of which might be incompatible and clash with each other. Edward A. Kolodziej identifies nine levels of decision and action which comprise the key components of the security policy of any state and which must be integrated by governments in order to develop and maintain coherent national security policies.<sup>22</sup> Four aspects of security policy will be considered in the thesis since they are crucial in the analyses of the NATO-Dual-Track decision:

---

developments in U.S. nuclear strategy is provided by Ernst-Christoph Meier. While on the one hand he stresses the two interpretations inherent in NATO strategy of flexible response he on the other hand elaborates mainly the compatibility of the U.S. and German doctrines which led to the NATO-Dual track decision. See Ernst-Christoph Meier, Deutsch-amerikanische Sicherheitsbeziehungen und der NATO-Doppelbeschluß. Die Auswirkungen NATO-interner Interessendivergenzen auf die Nuklearpolitik des Bündnisses. (Rheinfelden: Historische Forschungen im Schäuble Verlag, 1986)

<sup>21</sup> As early as 1981 Gert Krell, while pointing out the different interpretations of flexible response, identifies the Federal Republic as the main initiator of the LRTNF decision. See Gert Krell, Plädoyer für Rüstungskontrolle. Zur Kontroverse um die 'Nachrüstung'. (Frankfurt am Main: Hessische Stiftung Friedens- und Konfliktforschung, HSKF-Report (September 1981)) p.14. Also Milton Leitenberg explains the Federal Republic's active role in terms of strategic motives. He emphatically accuses the peace movements in Great Britain, the Netherlands and the Federal Republic of having mobilised public opinion only on the basis of using the United States as a "scapegoat" and of disregarding the political responsibility of their own European countries. Milton Leitenberg, Rüstung und Sicherheitspolitik. Sechs Studien über verhängnisvolle Entscheidungen. (Baden-Baden: Nomos 1986) p.181/182

<sup>22</sup> Thus the following components of a security policy will not be considered since they played only a marginal role in the evolution of the NATO Dual-Track decision: 1. the creation of political incentives and controls to direct the military establishment to support defined objectives; 2. the marshalling of public opinion, political parties, and interest groups to support regime and national objectives and policies; 3. the human and material resources, including advanced technology, needed to respond to security imperatives while addressing internal socioeconomic demands; 4. the announced strategies to communicate with, or to conceal policies from, allies, adversaries, and neutrals as well as from subordinates (military elites, functionaries); 5. the definition of military (and non-military) threats to the regime or nation or both, and the national and regime objectives to be supported by the use or threat of force. Edward A. Kolodziej, "Military Policy: The Use, Threat, and

1. The assumptions about the character of the international system and relations, and the Federal Republic's position within this system.
2. The attitude of West Germany's alignment strategies with the object of maximising security objectives, including arms control and disarmament measures.
3. The military doctrinal response to threats against the regime or nation or both, requiring the use or threat of force.
4. The force levels and weapon systems organised to respond to these functions.

The present study will ignore the fact that as a component of a security policy any state has to define the military and non-military threats to the regime or nation. Thus the threat posed by the Soviet Union and the Warsaw Treaty Organisation will be considered only insofar as the evolution of the NATO Dual-Track decision was influenced directly by very concrete Soviet armament steps. This omission is first due to the complexity of the East-West conflict and the arms race, and also to the fact that the focus of the present analysis is on the interplay of the members in an alliance and not on the international system as such. If as a result of these omissions the impression arises that the LRTNF modernisation decision has been induced to a considerable extent by the internal dynamics of an alliance and its institutional organisations, this would not be entirely unintentional. However, arms control considerations and the Federal Republic's emphasis on detente with the Soviet Union will be included.

In order to understand the motives behind the West German support for the Dual-Track decision the following questions must be answered:

1. Was the Federal Republic's support of the NATO-Dual Track decision primarily based on a strategic and military rationale?
2. Or was the West German politicians' agreement to the deployment of the LRTNF based first of all on a political rationale, namely the obligation to carry an alliance burden, imposed on the Federal Republic by the United States? .

An analysis of the motives of West German decision makers to support the NATO-Dual Track decision shows that the Federal Republic in NATO requested weapons with this particular long range, even against initial resistance in the U.S. administration. An effective arms control policy with a view to obviating the deployment of LRTNF was not pursued. Instead West German politicians pursued a policy line of maintaining the option of long-range theatre nuclear weapons in SALT.

After having achieved these results the conclusion is warranted that the Federal Republic's support for the NATO Dual-Track decision was not due to political obligations as a NATO ally. Thus the following questions arise:

- which strategic doctrines induced the West German politicians and strategic experts to request the option of long-range theatre nuclear weapons? what role do LRTNF play in the Federal Republic's strategic doctrine?
- which details of the programme to modernise the theatre nuclear weapons, e.g. the basing mode and the type of weapons, were requested by German politicians, and which originated in force development, employment and operational plans of the U.S. administration?
- to what extent was the LRTNF deployment decision a compromise between U.S. and West German strategic doctrines?
- or did the deployment of the LRTNF predominantly express the doctrines of one nation, and if so, of which one? Where is the point of fracture in these two strategic doctrines?

The thesis is an individual study, intended as a contribution to the field of international relations and provides evidence for theories that claim a decline in U.S. hegemonic power during the seventies. Until far into the eighties analyses of the Western alliance were based on the premise that U.S. hegemony dominated NATO. During the 80s an intellectual debate was initiated whether and how U.S. hegemony declined. While Keohane focused on the economic effects of the decline, Calleo expanded on the debate in the political and the security field.<sup>23</sup>

---

<sup>23</sup> Robert O. Keohane, After Hegemony. Cooperation and Discord in the World Political Economy, Princeton University Press, 1984. See David Calleo, Beyond American Hegemony. The Future of the Western Alliance, (New York: Basic Books, 1987) See also Dieter Senghaas, Die Zukunft Europas. Probleme der Friedensgestaltung, (Frankfurt am Main: Suhrkamp Verlag, 1986)

The thesis aims to serve as a further stimulus to examine the effects of the decline of U.S. hegemony on NATO and its power structure. However, these theories are only implicit in the thesis as the debates on the decline of U.S. hegemonic power encouraged me to adhere to my findings, which did not seem to fit in the traditional pattern of international relations.

The question arises whether the thesis can be regarded as a contribution to "peace research."<sup>24</sup> Generally the term is used in a very broad sense, since several disciplines claim to do research on peace. Narrowing down the term by referring to the discipline of "critical peace research" gives a more precise definition of peace research. Critical peace research is a school whose aim is to change the structural conditions of force and war beyond "system-inherent" limits. With respect to critical peace research, the ultimate political aim has not just been the absence of war, but the complete absence of social and national violence. The causes of violence and war as well as the means to eliminate them are central concerns of peace research. According to this definition, the thesis cannot claim to contribute to these aims. Moreover, it focuses on what politicians and strategic experts think and not on a criticism of the ideology underlying the dominant views, albeit they are sometimes briefly included. However, the thesis's attempt to elucidate the dilemma of NATO strategy is meant as a contribution to the

---

<sup>24</sup> In the Federal Republic "Peace research" developed against the background of the Second World War and the Cold War in the fifties. Peace researchers recognised the need to analyse the threat posed by weapons of mass destruction and by the Cold War beyond the scope of the methods and content of the conventional sciences of international law and international relations. They demanded that in this field science be interdisciplinary and experts should cooperate internationally. They understood their task as promoting the idea of peace and basically worked for the abolition, instead of the mere limitation, of force. The notion of war as a form of "communication" between states was strongly rejected by them. During the 1970s and 1980s peace researchers criticised, *inter alia* the strategic doctrine of deterrence, the U.S. "Military Industrial Complex", etc. They pointed out that war-fighting characteristics, which have always been implied in the U.S. strategy, gained new emphasis in the seventies. At the beginning of the eighties, peace researchers fundamentally criticised the NATO Dual-Track decision. Although the peace movement in the Federal Republic used peace research in its campaign against the weapons' deployment, peace research has always held a position of critical solidarity with respect to the peace movement, and has avoided to act as its agent. See Gert Krell, Die Diskussion über die Modernisierung der Mittelstreckenwaffen (Frankfurt: Hessische Stiftung Friedens- und Konfliktforschung, September 1981a) p.6-7. For the history of peace research see Dieter S. Lutz, "Friedens- und Konfliktforschung" in: Dieter S. Lutz (ed.), Lexikon Rüstung, Frieden, Sicherheit, (München: C.H. Beck, 1987), pp.124-130. For a review of peace research in particular in the Federal Republic and up-to-date, comprehensive bibliography, see Bernhard Moltmann, Perspektiven der Friedensforschung, Information Unit Peace Research Bonn, (December 1978)

debate whether or not to abandon that strategy: "Die Überwindung des Sicherheitsdilemmas setzt die Metakommunikation über diese Struktur voraus."<sup>25</sup> In this sense I would like the thesis to be also understood as a contribution to peace research.

The NATO debate during spring 1989 on the modernisation of short-range nuclear weapons and the air- and sea-based compensations in the INF-ranges at first sight seems to disprove entirely the findings of the present thesis. As in the 1979 LRTNF debate, it seems that due to its hegemonic position the United States imposes weapons on the Europeans and in particular on the Federal Republic. While there is no doubt that domestic considerations cause West German politicians to hope for a postponement of these unpopular decisions until the elections, the Federal Government, nevertheless, pursues its own strategic interests in these modernisation and compensation decisions. It has to be noted, for example, that the Chancellor's October 1983 directive for the implementation of the Montebello decision recommended to put emphasis on longer-range nuclear capable systems and to request the modernisation of the Lance missile including an increased range, and stand-off weapons of a greater range.<sup>26</sup> The thesis will explain the strategic background to the Chancellor's recommendation and to the Federal Government's welcoming of the equipment of additional F-111 with stand-off weapons. It will be shown that these strategic views requesting these particular weapons do not depend on party considerations, but simply on the adherence to flexible response.

The decision-makers, identified in this analysis, are not only politicians, but also a group of "strategic experts", who were in a position to give direct or indirect advice to German ministers via consulting the organs, sections and departments involved. The term "strategic experts" includes office holders involved in a specific decision at a specific time as well as civilian advisers who influenced the decision, such as analysts of the Ebenhausen Institute. The expert group in the Federal Republic, which was occupied with the

---

<sup>25</sup> "Metacommunication about this structure is a precondition for overcoming the security dilemma." Gert Krell, in his interesting attempt to relate peace research, security research and international relations with each other: "Friedensforschung - Sicherheitsforschung - Internationale Beziehungen", February 16, 1989. Lecture at the congress of the Arbeitsgemeinschaft für Friedens- und Konfliktforschung. February 17-19, 1989.

<sup>26</sup> Katrin Fuchs, floor debate, Deutscher Bundestag, Plenarprotokoll 11/16, June 4, 1987, p.949

modernisation plans, was small. It included experts from NATO organs and members of the respective sections in the Ministry of Defence, the Ministry of Foreign Affairs, the Chancellery and the Ebenhausen Institute.<sup>27</sup> Outside this group, it seems that the plan with its ulterior strategic considerations was unknown.

Although the impression might arise, the present thesis does not claim to be an analysis of security policy decision making according to the model of "bureaucratic politics." This approach interprets governmental behaviour as an outcome of bargaining games among players positioned hierarchically within the government.<sup>28</sup> The present analysis, however, can neither identify the majority of different governmental officials who played their games in form of compromises, coalitions, competitions and confusions, nor can it maintain the distinction between executive and consultant throughout the analysis. Moreover, no evidence will be provided for the direct influence of civilian analysts on the decision, although much attention will be given to their studies. Their influence is going to be deduced from other information and data, e.g. the institutionalised contact between the Ebenhausen Institute and German politicians. This does not imply that information which helps to understand the issue will be excluded. In any case a clear distinction between politicians and researchers would be difficult in this context because U.S. analysts frequently change their status. A famous U.S. example is Defense Secretary Schlesinger who was a former RAND analyst. A German example is Lothar Rühl who advised Helmut Schmidt in the seventies and who served as deputy spokesman and State Secretary.

It will be demonstrated that Chancellor Schmidt was not involved in the decision to the extent that one would expect and that his doctrine is distinct from that of the German strategic expert group. Defence Minister Leber participated and gave the main impulses for the modernisation of the long-range nuclear missiles. When Minister Apel, who seemed to be quite inexperienced in strategic nuclear matters, succeeded Leber in February 1978,

---

<sup>27</sup> Hoffmann contends that this group consisted of less than a dozen people. 1986, op.cit., p.21

<sup>28</sup> See for the model of bureaucratic politics Graham T. Allison, "Conceptual Models and the Cuban Missile Crisis" in Richard G. Head/Ervin J. Rokke, American Defense Policy (Baltimore and London: John Hopkins University Press, 1973, first edition 1965) pp.273-300



the course for modernisation was already set. In a NPG meeting he complained about the great influence of military and defence experts, but did not change the course.

Lothar Rühl played an important role in the campaign to install the weapons by participating in numerous conferences and contributing many articles and books to the strategic debate. Therefore Lothar Rühl will be quoted much more frequently than others. Secondly, among strategists he is the one who spelt out some plain truths. He was adviser to Chancellor Helmut Schmidt and contributed to Schmidt's famed 1977 London speech.<sup>29</sup> In January 1981, he acquired the position of deputy spokesman of the Social-Liberal government upon the recommendation of the Liberal Party.<sup>30</sup> In October 1982, as a result of the fall of the Social-Liberal government and the rise of the Christian-Liberal Coalition, Lothar Rühl became State Secretary in the Ministry of Defence.<sup>31</sup>

My analysis will focus on "strategic doctrines" presented by strategic experts. Neither the definition of the terms "strategy" and "doctrine" nor the difference between them are by any means clear within the strategic debate. The term "doctrine" has been applied to a wide range from broad policies and generalisations of U.S. defence policy<sup>32</sup> down to the level of the "doctrine" of a specific service. The term "strategy" has been used in a military sense, as well as in reference to the state "strategy" of using military force for a broad range of political aims, called "grand strategy". In the present context the term strategy will refer to the compromise formula of all NATO allies, the "NATO strategy",

---

<sup>29</sup> Helga Haftendorn, Sicherheit und Stabilität. Außenbeziehungen der Bundesrepublik zwischen Ölkrise und NATO-Doppelbeschluss. München: Deutscher Taschenbuch Verlag, 1985, p.15

<sup>30</sup> His 1987 book "Mittelstreckenwaffen in Europa: Ihre Bedeutung in Strategie, Rüstungskontrolle und Bündnispolitik" ("Intermediate-range weapons in Europe: Their meaning in strategy, arms control and Alliance policy") op.cit., which makes few references to other resources, reveals his insider position in the NATO organs during the seventies. Rühl who spent 15 years of his life in France where he acquired an insight into the strategic thinking of de Gaulle, was employed by the Second German television (ZDF) as their correspondent from 1973-1980. August Graf Kageneck, "Freunde auch an der Seine", Die Welt, November 25, 1980

<sup>31</sup> "Lothar Rühl, Deutscher Journalist, Dr. sc. pol., Staatssekretär", Munzinger Archiv, Internationales Biographisches Archiv, Ravensburg, March 5, 1983

<sup>32</sup> John W. Taylor quoted in Julian Lider, Military Theory. Concept. Structure. Problems. Aldershot: Gower Publishing Company, 1983 p.308

although, as it will be seen, it is sometimes hard to distinguish between what is official NATO strategy and what is U.S. national strategy.

In contrast to this use of the term "strategy", Fritz Ermath offered a definition of strategic doctrine which is useful in this context on an intermediate level between doctrines of particular services and grand strategy. Strategic doctrine is a

"set of operative beliefs, values, and assertions that in a significant way guide official behavior with respect to strategic research and development (R&D), weapons choice, forces, operational plans, arms control, etc."<sup>33</sup>

Thus "doctrine" in this study is always used in a way subordinate to "strategy". Since the doctrines to be analysed refer to the actual nuclear strategy of the nations involved, the term "strategic" doctrine instead of "military" doctrine is preferred here. Julian Lider's summary of the variety of interpretations of military or strategic doctrine in Western writings helps to supplement Ermath's definition by elaborating for whom and at which level the term "doctrine" is used.<sup>34</sup> The term "doctrine" has been systematised in this context as expressing not only the official military policy of one state, but also the consensus of opinion among a large number of professionals who represent a common experience, which is conceived on a national level. Thus, application of the term "doctrine" assumes the existence of a national doctrine to which governmental parties feel committed as a coherent concept of security and strategic policy. The doctrines which will be analysed on a governmental, departmental, institutional and individual level and the resulting differences will be pointed out. However, since the doctrines of German and U.S. politicians and strategic experts will also be analysed with respect to their national characteristics, the focus of attention is less on the variety than on the consensus of the national doctrines. For stylistic reasons "doctrine", "guideline" or "view" are used interchangeably.

Related to this problem of defining "doctrine" and "strategy" is the distinction between the different levels of a war. The decision to label a weapon "strategic", "tactical" or "operational" depends largely on the weapon's assigned role in war. The labels "Tactical Nuclear Weapons" and, more recently, "Theatre Nuclear

---

<sup>33</sup> Fritz W. Ermath, "Contrasts in American and Soviet Strategic Thought", in International Security, (Vol.3, No.2, Fall 1978) pp.138-155, p.183

<sup>34</sup> Lider, 1988, op.cit., p.309

Weapon" are defined largely by process of elimination and by setting them aside from the category "strategic weapons". More than other terms in the strategic debate the labels "strategic" and "tactical" create confusion and contain ambiguities. It seems that there are no absolute criteria for distinguishing between these two categories of weapons and if one examines weapon yield, weapon range, location of delivery system, location of target and alert status one discovers a continuous range of values, with much overlap.<sup>35</sup>

Even though defining a tactical nuclear weapon is a thankless task and in spite of the arbitrariness of their distinction, these terms can be understood as two poles of a continuum:

"The word "strategic" may refer to (1) attack by US or Soviet forces on opposing homelands; (2) attack on population (and/or industry) as distinct from military targets; (3) attack on missiles in silos and other long-range forces versus attack on general-purpose forces; (4) attack on "deep" targets; (5) nuclear as opposed to nonnuclear attacks; (6) attacks using long-range vehicles against any target; or (7) any attack launched from outside the theater. The word "tactical" may mean (1) avoiding superpower homelands, fighting in allied territory only; (2) attack only on military targets; (3) attack only on general-purpose forces; (4) nonnuclear attack or perhaps nuclear attack only on the battlefield; (5) attack using short-range vehicles."<sup>36</sup>

With the introduction of the U.S. Army doctrine AirLand Battle in 1982 the level of an "operational" war as distinguished from and subordinate to a "tactical" war was introduced:

"The operational level of war uses available military resources to attain strategic goals within a theater of war. Most simply, it is the theory of larger unit operations. It also involves planning and conducting campaigns. Campaigns are sustained operations designed to defeat an enemy force in a specified space and time with simultaneous and sequential battles. ... Tactics are the specific techniques smaller units use to win battles and engagements which support operational objectives."<sup>37</sup>

---

<sup>35</sup> For the definition of 'operational', 'tactical', 'strategic' see also Milton Leitenberg, "Background materials in tactical nuclear weapons (primarily in the European context)" in Stockholm International Peace Research Institute (SIPRI), Tactical Nuclear Weapons: European Perspectives (London: Taylor and Francis, 1978), pp.3-136, p.4

<sup>36</sup> Henry S. Rowen and Albert Wohlstetter, "Varying Response with Circumstance" in: Holst, Johan J. / Nerlich, Uwe (eds.). Beyond nuclear Deterrence. New aims. New Arms. (New York: Crane, Russak and Company, 1977), pp225-238, p.234, emphasis by S.P.

<sup>37</sup> U.S. Department of the Army, Operations Field Manual 100-5, Washington D.C., August 20 1982, p.2-3, emphasis by S.P.

Both "tactical" and "operational" are applied to the war "theatre" which is defined as follows:

"The geographical area outside continental United States for which a commander of a unified or specified command has been assigned military responsibility."<sup>38</sup>

Since the present analysis also deals with a concrete U.S. armament programme, it is necessary to scrutinise U.S. strategic nuclear policy. For analytical purposes it is helpful to delineate several facets, into which U.S. nuclear policy can be usefully divided:

Declaratory policy gives guidance to American officials on what they should say publicly about U.S. employment and acquisition policies. In the Defense Secretary's annual report and in other official rationales of budgetary and other decisions the official policy is outlined.

The force employment or action policy describes the targets and how the United States plans to use the nuclear weapons in the nuclear war.

The force development policy guides decisions on size, capabilities, and deployment mode of the weapons.

Arms control policy has been developed which provides "bargaining chips" and helps to manage arms control negotiations.

The operational policy rules activities such as the alert rates.<sup>39</sup>

While the analysis deals with all these categories put forward by the U.S. defense analyst Desmond Ball, it focuses on the force development and actual employment policy of long-range theatre nuclear weapons systems.

Strategic discussion is full of terms which are not defined and which do not experience any clarification although they represent quite important notions. These ambiguities in language, which allow a wide spectrum of interpretation, might be intended, since recommendations of German analysts in nuclear

---

<sup>38</sup> U.S. Department of Defense. Dictionary of Military and Associated Terms, The Joint Chiefs of Staff, Washington D.C.: U.S.G.P.O., September 3, 1974, p.333

<sup>39</sup> See Desmond Ball, "U.S. Strategic Forces. How would they be used?" in International Security, Vol.7, No.3, (Winter 1982/83), pp.31-60, here pp.32. See also the categories Lynn Etheridge Davis, "Limited Nuclear Options, Deterrence and the New American Doctrine" Adelphi Papers, No. 121 (London: The International Institute for Strategic Studies, Winter 1975/76) p.1

issues could easily be misunderstood as interference with concerns which are not theirs.

These ambiguities are provoked by the nature of deterrence theory itself and by the endeavours to hide the destructive aspects of nuclear war behind euphemism.<sup>40</sup> Green pointed out that deterrence theorists prefer the term "countervalue warfare" to describe "what is after all counterpeople warfare (thus using the word 'value' in its economic rather than ethical sense.)"<sup>41</sup> Schelling confirms our need for "a richer menu of contingencies and strategies."<sup>42</sup>, and Kahn concedes that "destruction is likely to be greatly intensified at the upper end of the escalation ladder", which simply means that he does not dare to guarantee that his escalation model will function as a deterrent so that a catastrophic war which would kill millions of people can be positively excluded.<sup>43</sup> After having given these illustrative examples, Green concludes:

"More than any other aspect of the thought of deterrence theorists, perhaps, this reliance on euphemism reveals the deep problem of ethical justification which is central to their writings."<sup>44</sup>

The term "limited war" is an expressive example of this sometimes even casual language. If this term is used, it is often not defined what kind of limited war is referred to: limited to geographical areas, periods of time, means of employment, or to all three criteria? The arbitrariness in the use of this term becomes prominent when Schelling suggests that it is always possible to find

---

<sup>40</sup> Philip Green. Deadly Logic. The Theory of Nuclear Deterrence. (New York: Schocken Books, 1968), p.222

<sup>41</sup> Emphasis in the text, ibid

<sup>42</sup> T. C. Schelling "Comment" in : Klaus Knorr and Thornton Read (eds). Limited Strategic War. (New York: Praeger, 1962), p.253

<sup>43</sup> Green, 1968, op.cit., p.222

<sup>44</sup> Green, 1968, op.cit.; As early as 1962 Charles E. Osgood hinted to the abstract terms used in talks about nuclear war. These terms would get their meaning only indirectly by association with other words, not directly from real objects which belong to our world, such as 'blood', 'bread' and 'mother'. Charles E. Osgood, An Alternative to War or Surrender, (Urbana: University of Illinois Press, 1962) pp.22-23

limits to a war: "War was limited in Korea, and gas was not used in World War II."<sup>45</sup> Thus World War II also can be placed in the category of limited war.

When compatible with their intentions, strategic analysts complain about the euphemistic language used by their colleagues on the deterrence issue. When Fred Ikle argues in favour of a no-first use policy and thus against the risk of escalation into an all-out nuclear war, he complains that the potentially most painful event in history is dealt with by disguising it behind the pretty name "nuclear exchange", as if it were a mere transaction in foreign trade."<sup>46</sup> And if strategists talk about things which are very important to them, their language is dramatic and unfactual: in context of the neutron bomb debacle they tend to speak of a "traumatic controversy".<sup>47</sup>

Another methodological problem in the thesis is the imprecise but unavoidable distinction between "European" and "German" doctrines and policy. In many analyses of the evolution of the NATO Dual-Track decision U.S. policy is contrasted with "European" doctrines. If these analyses refer to the European view, it will not only be presupposed that the German national doctrine was included, but also that the "European" view is dominated by the British and German views. The description of the Nuclear Planning Group in Section I will demonstrate that the Federal Republic and Great Britain are the leading European nations concerning nuclear issues. A supplement of a specific British view would have certainly contributed to greater precision in the analysis, but is outside the scope of this study. Still we shall attempt to distinguish between the British and German view as clearly as possible.

Although I would have preferred to avoid the use of the term "coupling" because of its imprecise and predominantly political definition, any analysis of U.S. - European security relations cannot help dealing with it. "Coupling" in a general sense is used to convey the broader political or diplomatic concept of a linkage between European and American views of security. "Coupling" refers to the Europeans' dependence --and above all those of the non-nuclear states-- on

---

<sup>45</sup> Thomas C. Schelling. The Strategy of Conflict. (Cambridge, Massachusetts: Harvard University, 1960, 4th printing 1970), p.75

<sup>46</sup> Charles Fred Ikle. "NATO's 'First Nuclear Use': A Deepening Trap?" Strategic Review, Vol.8, No.1, (1980), pp.18-23, p.22

<sup>47</sup> K.-Peter Stratmann. NATO-Strategie in der Krise? Militärische Optionen von NATO und Warschauer Pakt in Mitteleuropa. (Baden-Baden: Nomos, 1981), p.18.

the U.S. nuclear umbrella and thus on the permanent commitment of the United States to use its strategic arms in order to deter Soviet aggression against Europe. Thus the term can be used interchangeably with "extended deterrence" or "nuclear umbrella". European anxieties about "decoupling" from the U.S. strategic forces have emerged every so often since the Soviet development of delivery systems for a second strike in 1957. The suspicion does not seem to be far fetched that the term "coupling" is used frequently in the strategic debate in order to avoid getting too precise about the intentions of the speaker. The attempt will be undertaken to break up "coupling" into its military equivalents and thus to "demythologise" it.

The sources used for the analysis of U.S. nuclear policy can be categorised into five groups:

1. reports of the U.S. administration to Congress, in particular the annual budget reports of the Department of Defense to Congress, and the annual report of the Arms Control and Disarmament Agency (ACDA) of the State Department;
2. Investigations and reports of the committees and research service agencies of the United States;
3. declassified, but still censored Congressional Hearings;
4. publications of the U.S. strategic community in numerous periodicals;
5. secondary literature on the history of the decision and its strategic and political background.

As far as U.S. sources on U.S. policy are concerned there is so much material freely available going into so much detail and in so many corroborative ways that it does not seem to be too ambitious to expect reliable results. The Boston Study group which analysed U.S. defence policy concluded: "Of course there are material gaps in published information: though in detail significant, they are in no way major."<sup>48</sup> The "true barrier"<sup>49</sup> to a reliable analysis of U.S. nuclear policy is the complexity of U.S. organisations which deal with these questions.

---

<sup>48</sup> For the same evaluation see The Boston Study Group, Winding Down. The Price of Defense (San Francisco: W.H. Freeman and Company, 1979) p.xvii

<sup>49</sup> ibid

The questions raised above will be answered by a documentary analysis, involving for the German doctrines:

1. official declarations and reports of the German government, i.e. the White Papers, the Bulletin of the Government, special material for the legitimization of the NATO-Dual Track decision;
2. biographies and interviews of politicians involved;
3. contributions by politicians to the strategic debate;
4. publications of the strategic community, such as researchers of the Ebenhausen Institute, the Ebenhausen Institute's internal reports;
5. reports of the conferences of the strategic community;
6. newspaper articles.

This analysis is not supplemented by interviews with these members of the strategic community for the same reason that only public sources were used (apart from few exceptions): only with a certain degree of public exposure does the speaker feel committed to his statement and obliged to maintain consistency between the public statements and the pursued policy. Another reason for the omission of interviews was the fact that the present thesis refers to a decision which was accomplished a decade ago. Therefore almost all politicians involved have already been asked, some even several times, about these events, and it does not seem likely that one would get any new information. The material already provided in previous interviews by the major actors has been effectively utilised in my study. But many talks with military men at SHAPE, AFCENT, AFNORTH and AFSOUTH and civilian researchers at the International Secretariat of the North Atlantic Assembly during a traineeship, provided the opportunity for a continuous examination of the hypotheses and a better understanding of the results.

#### **1.4. Organisation of the thesis**

The thesis is organised in three sections. Section I deals with the consistent dilemma of NATO, produced by the flexible response strategy. Chapter 2 describes the evolution of flexible response by focusing on the two functions inherent in nuclear deterrence: deterrence by denial or war-fighting and deterrence by punishment or retaliation. It will be pointed out that the refinement of war-fighting deterrence was a result of the endeavours to transform nuclear weapons into feasible instruments of foreign policy. Since



NATO strategy is dominated by U.S. strategy, a brief description of its evolution is necessary. It will be demonstrated that in contrast to U.S. declaratory policy, U.S. war plans also consisted of no-cities or counterforce options from the very outset of nuclear strategy. This part will also serve to introduce and define several key terms of strategic analysis. The description of the elaboration of war-fighting options shall be continued with PD 59 and completed with the 1988 U.S. report, called "Discriminate Deterrence". Attention then shifts from NATO strategy to U.S. strategy. The process of NATO's retreat from the strategy of massive retaliation to the adoption of flexible response will also be described under the aspect of the transformation of nuclear weapons into feasible instruments of foreign policy. We will concentrate on McNamara's Athens speech in which he announced his revision of U.S. strategy toward a strengthening of the conventional component and its shift to counterforce targeting. A brief description of the TNF in Europe will serve as a background to elaborate the parallels between both the 1979 LRTNF decision and the LRTNF deployments during the sixties and the plans for a Multilateral Force. The problems discussed at that time were similar to those of the 1979 discussion: doubts in the military rationale, strong arguments for sea- instead of land-basing, and the European concern about the U.S. umbrella.

In Chapter 3 I intend to elaborate the U.S. and the German interpretation of flexible response, originated by the different geographical positions of both allies. While Europeans have been more concerned with the retaliation function of deterrence and the escalating character of the strategy, the United States put stronger emphasis on the usability, i.e. the war-fighting character of the strategy. While the United States would like to postpone the use of nuclear weapons against Soviet territory as long as possible, the Europeans do not feel comfortable with the idea of battlefield use of nuclear weapons since the battlefield would most likely be Europe itself. After the description of flexible response the different reactions within the German parties upon its introduction shall be compared. In this context it will also be emphasised that at the same time research on strategic matters was institutionalised in the Federal Republic. The divergent U.S. and German national doctrines will be set against each other by analysing their different perceptions of the role of nuclear weapons derived from their different geography: while the United States prefers an emphasis of the conventional component on a tactical level yielding military results, the German guidelines contemplate a nuclear emphasis on a strategic level meant primarily as a political signal. The different guidelines on the role of nuclear weapons

result in two, principally incompatible first use concepts. While the U.S. prefers first use on a theatre level at as late a stage as possible which should be accomplished with military effectiveness, the German interpretation of flexible response suggests first use as early as possible, on a strategic level and only to serve as a signal to the Soviet Union. The ambiguity of flexible response on the level of military procurement will be exemplified by presenting the varied history of the TNF. This ambiguity will also be shown as far as the operational target planning of nuclear weapons is concerned. In this context evidence will be submitted for the fact that –at least theoretically– there exists a dual command structure for U.S. forces in Europe which is designed to allow for unilateral U.S. control over nuclear weapons. This provides the background for my line of argument that German strategic analysts could not expect that in case of war German security interests would be considered.

Section II analyses the evolution of the NATO-Dual Track decision in the context of NATO and the SALT process. Special attention will be given to the fact that the LRTNF modernisation was planned as a solution to reconcile the contradictions within flexible response. The discussions held in the Nuclear Planning Group on the guidelines of first and follow-on use of nuclear weapons convey a considerable influence of European doctrines. However, these guidelines are in no way obliging. The beginning of the restructuring of NATO TNF in the early seventies will be discussed with regard to the impact that U.S. Secretary Schlesinger's revision of the TNF posture made. Then the influence through technological developments and the German guidelines for the modernisation of the TNF shall be considered.

Chapter 5 will describe U.S.-European conflicts over SALT, generated by the Europeans' concern for maintaining and consolidating the options for long-range theatre nuclear forces and the U.S. reluctance to yield to these European, in particular German, requests. In SALT-I German strategic experts requested that the United States exclude the FBS from the negotiations. The FBS issue will be discussed in detail in order to show that a wrong treatment of the grey-area problem would have obviated the whole roundabout process by which the superpowers deployed and then dismantled the Pershing II and the cruise missiles. In this context an interpretation of Schmidt's 1977 speech as well as a discussion of his strategic beliefs will be delivered.

The political reasons for overcoming the Carter administrations' reluctance and the emergence of the transatlantic consensus of deployment will be the subject of Chapter 6. It will be argued that German political views dominated in respect to non-singularity, land-deployment and the link to arms control.

Section III aims at giving an answer to the question of whose interpretation of flexible response dominated in the request for intermediate-range, land-based and, therefore highly vulnerable nuclear- tipped ballistic and cruise missiles: the German or the U.S. interpretation. For the clarification of this problem different employment options shall be discussed.

Chapter 7 will be headed by a brief discussion on the role that the SS-20 played for the evolution of the LRTNF decision. It will be argued that the final compromise can be presented as a joint U.S. and German acceptance of providing means for escalation control. The ambiguous data of the Pershing II seemed to have helped that U.S. and German strategic experts were able to compromise on the LRTNF, since the ambiguous data impeded a clear-cut determination of the LRTNF's employment options.

The Pershing II and cruise missile's role as spearheads for a U.S. first strike strategy will be one U.S. employment option to be analysed in Chapter 8. The Schlesinger doctrine with its implied revision of TNF shall be analysed with regard to what extent the weapons have originated in U.S. defence programs. While the weapons are certainly contemplated for counterforce and shifting targets, the warranted complaints in the U.S. strategic community on the weapons' vulnerability suggest the Pershings' and cruise missiles' role as means for follow-on use.

The German first use concept, elaborated in an idealtypical way by an analyst of the Ebenhausen Institute, will serve to clarify the employment options of the LRTNF in German doctrines in Chapter 9. One of the main documents will be Karl-Peter Stratmann's "NATO in der Krise" ("NATO in crisis"), published in 1981, which explained the 1979 decision from a German point of view. He advocated deployment of military means necessary to attack Soviet territory with a single restrained nuclear strike. It will be pointed out that the basic elements of Stratmann's theory of controlled nuclear strategic war can be interpreted as the refinement and elaboration of German strategic doctrines, also advocated on a governmental level and in NATO. German strategic

doctrines which envisage the new LRTNF also for follow-on use, in case first use should fail, will be considered as well. It will be demonstrated that German doctrines dominated the outlining of the hardware decision in respect to the range and the missiles' land deployment. The weapons' vulnerable deployment mode will also be discussed in detail. Based on the results of the thesis the summary attempts to explain the INF treaty.

## *Section I: The contradictory nature of the strategy of Flexible Response*

This section focuses on the contradictions produced by NATO's strategy of flexible response. While chapter 2 describes the evolution of flexible response in context of the process of transforming nuclear weapons into feasible weapons for foreign policy objectives, chapter 3 elaborates the different U.S. and German interpretations of flexible response and the two resulting incompatible first use concepts.

### *2. The evolution of flexible response*

In the beginning flexible response as a refinement of the original concept of nuclear deterrence will be in the focus of attention. Nuclear deterrence implies two functions: it means threatening the opponent with severe punishment as well as to deny the control of territory and population. The function of deterrence in contesting the opponent's control of territory has been subject to a continuous refinement and elaboration. While the "original" strategy of nuclear deterrence by retaliation contemplated to target the opponent's cities and industry, intended as a threat as terrifying as possible, the process of elaborating nuclear deterrence led to U.S. war plans of targeting also and primarily the opponent's forces, the so-called "counterforce targeting". In NATO strategy the refinement of denial or war-fighting options was expressed in the retreat from massive retaliation together with the simultaneous acceptance of a strategy implying flexible options. The repetitive character of problems in NATO's hardware decisions will be described by referring to the deployment of theatre nuclear forces (TNF) in Europe and the plans to establish a Multilateral Force (MLF). The problems of the LRTNF modernisation in 1979 will be set against those of the hardware decisions in the fifties and sixties.

#### *2.1. The nature of nuclear deterrence*

Almost immediately at the beginning of the nuclear age in 1945 the notion of nuclear deterrence by threat of retaliation was put forward as the dominant military strategy for the defence of the United States. From the huge destruction power of nuclear weapons Bernard Brodie, one of the classical writers on nuclear deterrence, concluded that from now on the most decisive purpose of

the U.S. military establishment would not be to win wars any more, but to avert them. War prevention by threat of "retaliation" was the basic principle of Brodie's concept. Therefore the most vital step in any U.S. security programme in the age of nuclear weapons should be therefore to take measures which guarantee in case of an attack the possibility of "retaliation in kind".<sup>1</sup>

Almost 30 years later an official definition of "deterrence" by the U.S. Department of Defense suggests that nuclear deterrence is still identified with the principle of retaliation and punishment:

"The prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counter action."<sup>2</sup>

However, during the elaboration of nuclear strategy a second function of deterrence emerged: the aspect of denial or, as it is also called, war-fighting function of deterrence.

As early as 1969 Dieter Senghaas in his noted book "Abschreckung und Frieden. Studien zur Kritik organisierter Gewaltlosigkeit" explains convincingly why the concept of deterrence by retaliation was necessarily supplemented by the elaboration of war-fighting options. According to Senghaas the separation line between war and peace in our society and political life no longer exists. This state of society is called "organised peacelessness". Deterrence policy is the most evident manifestation of this link<sup>3</sup> between peace and war. While deterrence policy is supposed to eliminate open war, deterrence at the same time necessitates a permanent preparation for war:

"Das Ergebnis ist eine Praxis, die gewissermaßen den potentiellen Krieg laufend antizipiert, um ihn in seinen möglichen manifesten Formen einzudämmen."<sup>4</sup>

<sup>1</sup> Brodie, Bernard, The Absolute Weapon. (New York: Harcourt, Brace and Co. 1946) p.76

<sup>2</sup> U.S. Department of Defense, Dictionary, op.cit., 1974, p.107

<sup>3</sup> Dieter Senghaas speaks of "Verklammerung". Dieter Senghaas, Abschreckung und Frieden. Studien zur Kritik organisierter Friedlosigkeit. (Frankfurt: Fischer Taschenbuch Verlag, 1969, 1972), p.18

<sup>4</sup> "The result is a practice which as it were continuously anticipates potential war in order to stem its possible manifest form." Senghaas concludes that peace will therefore only be established after the system of deterrence has been overcome. ibid, p.19

Deterrence is aimed at preventing an open international conflict, which would signify catastrophe, but by means of rational manipulation of force rather than by its elimination. Since policy in its traditional manifestation is dependent on force as an instrument readily available, the rational use of weapons cannot be renounced in the nuclear age. Military strategists are concerned with finding solutions to make nuclear weapons usable for the reestablishment of this relation between policy and force, that Senghaas calls a "cost-benefit analysis of foreign policy action".<sup>5</sup>

For almost 40 years, deterrence policy and theory has been subject to elaborations and modifications.<sup>6</sup> Publications discussing the rational use of military power resulted in demanding that also nuclear weapons should be transformed into feasible instruments. Due to their huge destructive power nuclear weapons were inadequate means for politicians in times of crisis, since they would only leave open the decision between suicide and surrender. Accordingly, more "flexible" and "graduated" military options, put into effect a process of "conventionalising" and "miniaturising" nuclear weapons. The NATO strategy of flexible response expresses one of those attempts to reestablish the traditional pre-nuclear role of weapons as instruments for foreign policy:

"Abschreckungsdoktrinen sind nicht Ausdruck praxisferner, nur intellektueller Analyse, sondern praktisches Handeln bestimmende Programme. Bei allen Unterschieden, die sie im einzelnen kennzeichnen, sind sie doch insgesamt auf die geschichtsmächtige und wohl folgenschwerste Entwicklung der Nachkriegszeit bezogen: auf die sukzessiv geglückte, erneute Zuordnung von Politik und Gewalt. Strategischer Analyse gelang es nämlich, jene (...) Erstarrung und Lähmung von Gewaltpolitik durch die Formulierung von diversen Doktrinen vom abgestuften Gebrauch der Gewalt zu überwinden."<sup>7</sup>

---

<sup>5</sup> "Kosten-Gewinn-Kalkül außenpolitischen Handelns", *ibid.*, p.62

<sup>6</sup> While there are innumerable analyses justifying deterrence policy, critical views of deterrence are an exception. See for example: Carl Friedrich von Weizsäcker (ed.), Kriegsfolgen und Kriegsverhütung, (München: Carl Hanser Verlag, 1971); Horst Afheldt, Verteidigung und Frieden. Politik mit militärischen Mitteln, (München, Wien: Carl Hanser Verlag, 1976); Anatol Rapoport, Strategy and Conscience, (New York: Schocken Books, 1964); Green, 1968 *op.cit.*

<sup>7</sup> "Doctrines of deterrence are not an expression of a purely and theoretical analysis, but programs which determine practical action. In spite of all their specific differences they all refer to the historically most important development in the post-war era: the renewed, gradually successful new integration of politics and force. Strategic analysis succeeded in surmounting precisely this paralysis and ossification of the power policy by formulating diverse doctrines of a graduated use of force." Senghaas, 1972, *op.cit.* p.64. Emphasis in the text

However, in this context Senghaas warns us not to forget that these modern war scenarios, whether realised either technically or in doctrines, are produced in order to demonstrate their effectiveness to the opponent:

"So frustrierend auf lange Sicht gesehen eine Zurschaustellung derartiger Kapazitäten und die ständige Propagierung eines möglichen, angezielten Kriegsverlaufs ist, so wollen solche Bilder doch zunächst nur stumme Schlachtordnungen aufzeigen."<sup>8</sup>

Thus, deterrence theory has always implied the following two types: "deterrence by punishment or retaliation" versus "deterrence by denial or war-fighting", or, "punishment" versus "defeat". In this analysis the first type will be referred to simply as "deterrence", since within the strategic debate it is usually identified with the original or "pure" notion of deterrence. The difference between these two poles can be reduced to one question: could nuclear weapons be useful in the same way as war weapons have been throughout history? Those who answered "no" stress the purely deterrent function of nuclear weapons and the inability of nuclear weapons to be used like conventional weapons. Therefore nuclear weapons can only be employed to punish the attacker and it is sufficient to maintain their survivability as retaliatory forces.

Consequently, those who answered "yes", have to be concerned with elaborating the circumstances, objectives and kind of nuclear weapons which are necessary for implementing such a strategy. If nuclear weapons can be used in a traditional way then they will be employed in order to decide the battle, to defeat the enemy and to win the war.

This "defeat" and "denial" aspect of deterrence is described by Paul H. Nitze:

"The alternative position was that deterrence would be greatly strengthened by the ability to face an enemy with military capabilities and a strategy that would deny him the ability or perception that he might successfully prosecute a war-winning strategy, and emerge from a war in a predominant military position".<sup>9</sup>

---

<sup>8</sup> "However frustrating a demonstration of these capacities and permanent propagation of a possible, calculated course of the war might be in the long run, these scenarios aim only to serve as a demonstration of tacit battle array." *ibid*, p.67 emphasis in the text

<sup>9</sup> Emphasis by S.P., Paul H. Nitze, "The Alastair Buchan Memorial Lecture", *Survival* Vol.27, No.3 (May/June 1985) p.98-107, here p.100. See also Dieter Senghaas' helpful review of the evolution of deterrence: "Rückblick und Ausblick auf



Nitze's remark indicates the crucial difference between "war-fighters" and those who believe in the primacy of the political signal, thus the punishing function of deterrence: adherents of the "war-fighting school" are characterised by their thinking in terms of military success. They argue:

"that once NATO has been driven to the point of using nuclear weapons ... then the primary objective of such use should be to gain an immediate military victory, at least at the local level."<sup>10</sup>

Michael Legge, a RAND analyst, points out that the term "nuclear war-fighting" is imprecise in that all forms of use of theatre nuclear weapons, apart from demonstrative use, involve an element of war-fighting. He suggests instead using "nuclear war-winning", as a more accurate term. In this study still the term "war-fighting" is adopted, since it is the more common expression within the strategic debate.

However, an absolutely clear distinction between the retaliation and war-fighting functions of deterrence cannot be made, "nor can either function be attributed exclusively to any particular kind of military force."<sup>11</sup>

Before starting with the discussion on the different interpretations of flexible response resulting from these two types inherent in deterrence policy, it will be shown how little both of these aspects are distinguishable in real war contingencies and operational plans. The refinement of nuclear war-fighting deterrence was expressed in setting up counterforce options on the operational level of U.S. war plans and in NATO's retreat from the strategy of massive retaliation.

---

Abschreckungspolitik", in: Franz Böckle and Gert Krell (eds.), Politik und Ethik der Abschreckung. Theologische und sozialwissenschaftliche Beiträge zur Herausforderung der Nuklearwaffen (Mainz, München: Grünewald und Kaiser, 1984) p.98-132

<sup>10</sup> Legge, 1983, op.cit., p.20

<sup>11</sup> Glenn H. Snyder: "Deterrence by Denial and Punishment" in: Bobrow, Davis B. (ed.), Components of Defense Policy, (Chicago: Rand McNally and Company, 1965) pp.209-237, p.209

## 2.2. Refinement of war-fighting deterrence

From the outset, i.e. from the establishment of the NATO alliance, it has been American strategic thinking that has dominated NATO strategy. Only against the background of the evolution of U.S. strategy and its operational plans the elaboration of NATO strategy is understandable, and thus also the U.S.-European conflicts over the interpretation of NATO's flexible response. The dominant characteristic in the evolution of U.S. nuclear strategy is its consistent refinement of nuclear war-fighting options.

### 2.2.1. Counterforce options as consistent elements in U.S. strategy

By the threat of mutual annihilation, which was supposed to keep either nation from striking first, the NATO strategy of massive retaliation and the U.S. doctrine of Mutual Assured Destruction (MAD) strategy corresponded in the most direct and understandable way to the original concept of deterrence by punishment.<sup>12</sup> The MAD doctrine was accused by many in the U.S. strategic community of foregoing U.S. military superiority. A definition of MAD by an opponent reads as follows:

"Both sides accordingly would have merely enough forces to survive a surprise first strike and still be able to retaliate massively against the enemy's cities, presumably with the better hidden - but relatively small and inaccurate - submarine-launched missiles. The theory, of course, depends on both sides playing the game".<sup>13</sup>

It is, however, obvious that at least the United States, as it is proven today, did not play the MAD game. Today, after more than 25 years, it is widely recognised that while U.S. declaratory nuclear strategy in the 1960s emphasised assured destruction and the threat of inflicting unacceptable damage on Soviet cities and industry should the Soviet Union dare to attack, the U.S. operational plan contained significant options against Soviet forces, the so-called counterforce options. Counterforce is defined as follows:

---

<sup>12</sup> D.A. Rosenberg, "The Origins of Overkill. Nuclear Weapons and American strategy 1945-1960" in International Security, Vol.7, No.7 (1983) pp.3-71. Aaron L. Friedberg, "A History of the U.S. Strategic 'Doctrine' - 1945-1980" in Journal of Strategic Studies, Vol.3, No.3, (December 1980), pp.37-71

<sup>13</sup> W. Scott Thompson, "Introduction" in: W. Scott Thompson (ed.), National Strategy in the 1980s. From Weakness to Strength (New Brunswick, London: Transaction Books, Institute for Contemporary Studies, San Francisco, California, 1980), p.6-7

"As a nuclear strategy, counterforce means aiming attack missiles at military targets. The word means to *counter* the enemy's military *forces* which includes missile silos, command posts, nuclear storage depots, strategic air bases, communications centers, and submarine pens. Many of these targets are called 'hard' because they are buried deep in bunkers or silos and are reinforced with steel and concrete".<sup>14</sup>

U.S. researchers revealed that "counterforce" has been the Pentagon's military doctrine at least since the mid 1950's.<sup>15</sup>

A second widely recognised fact is the gap between U.S. declaratory and actual employment policy<sup>16</sup>. Paul Nitze was the first to identify a gap between U.S. declaratory policy and its action policy:

"... (T)he word 'policy' is used in two related but different senses. In one sense, the action sense, it refers to the general guide lines which we believe should and will in fact govern our actions in various contingencies. In the other sense, the declaratory sense, it refers to policy statements which have as their aim political and psychological effects."<sup>17</sup>

This gap between the governmental posture and what would actually happen in the event of implementation of the SIOP (Single Integrated Operational Plan), which is a national U.S. plan and assigns weapons to parts of the U.S. national

---

<sup>14</sup> Robert C. Aldridge, First Strike! The Pentagon's Strategy for Nuclear War (Boston, MA: South End Press, 1983) p.24, emphasis in the text

<sup>15</sup> Aldridge, 1983, op.cit., p.22

<sup>16</sup> Lynn Etheridge Davis distinguishes the following elements of American nuclear policy: employment, acquisition, declaratory and deployment policy: "Employment policy describes the targets and how the United States plans to use the nuclear weapons which it possesses today. Acquisition policy establishes criteria for developing and procuring nuclear weapons systems for the future. Declaratory policy gives guidance to American officials on what they say publicly about the employment and acquisition policies. Deployment policy designates where nuclear weapons are to be stationed". Lynn E. Davis, 1975/76, op.cit., p.1

<sup>17</sup> Paul H. Nitze, "Atoms, Strategy and Policy" in Foreign Affairs, Vol.34 (January 1956), p.187-198, here p.187

Strategic Target List (NSTL)<sup>18</sup>, is dated back by Pringle and Arkin even to "the beginning of the nuclear age"<sup>19</sup>.

Although it seems at first sight more humane to target missiles and forces of the enemy instead of his population, the counterforce strategy has been criticised for its destabilising character. Counterforce violates the basic principle of deterrence: in a deterrence theory the guarantee is implicit that the strategic forces are invulnerable to an opponent strike in order to be able to retaliate after an attack. Therefore a rational deterrence strategy must avoid offering the opponent a situation in which he even finds a military option for his weapons. In short, deterrence is based on the principle of not providing targets which might be militarily rewarding.<sup>20</sup> The result of counterforce is that the Soviets might think that the U.S. is preparing a first strike against them, since there would be no point in launching missiles targeted at the enemy's empty silos. If one party is subject to the threat of substantially losing its retaliatory second strike capability, an indispensable principle of deterrence is violated. Thus, the Soviets would be provoked to initiate preemptive strikes in a crisis in order to avoid damage to and loss of their second strike capability. The destabilising nature of a counterforce strategy is described in a Congressional Budget Office background paper as follows:

""There may be an inescapable dilemma involved in the procurement of second strike counterforce capability: a US arsenal large enough to attack Soviet ICBMs after having absorbed a Soviet first strike would be large enough to threaten the Soviet ICBM force in a US first strike. Moreover, the Soviet Union, looking at capabilities rather than intentions, might see a US second strike capability in this light. Faced with a threat to their ICBM force, Soviet leaders facing an international crisis might have an incentive to use their missiles in a preemptive strike before they could be destroyed by the United States. (Emphasis added)""<sup>21</sup>

---

<sup>18</sup>The SIOP is supposed to coordinate the weapons for the general nuclear war as well as the forces which are assigned to NATO in case of war, such as the Poseidon. SIOP consists of Limited Nuclear Options (LNO) which are preplanned in order to support regional operations. See the detailed discussion in chapter 3.6.1.

<sup>19</sup> Peter Pringle / William Arkin. SIOP. Nuclear War from the Inside. (London: Sphere Books Ltd., 1983), p.18

<sup>20</sup> Afheldt, 1976, op.cit., p.99

<sup>21</sup> Counterforce Issues for the US Strategic Nuclear Forces, Congressional Budget Office Background Paper (January 1978), p.32, quoted in Aldridge, 1983, op.cit., p.38/39

Robert C. Aldridge, a former Polaris and Trident missile design engineer at Lockheed, points out that counterforce is not necessarily equated with first strike because there are degrees of counterforce. Aldridge concludes: "Although counterforce does not necessarily mean first strike, first strike is counterforce in its maximum sense".<sup>22</sup> Counterforce strategy and war-fighting can be regarded as synonyms <sup>23</sup>.

One of the key influences on the early Kennedy- McNamara strategic postures was a series of studies on the counterforce and "no-cities" strategy, made by the RAND corporation in 1959-60 under the auspices of William Kaufmann. McNamara, who was briefed by Kaufmann, reviewed U.S. nuclear policy in the direction of a counterforce strategy. The Single Integrated Operational Plan (SIOP) was revised substantially by McNamara and completed by the summer of 1961. The new U.S. SIOP was given five "options" plus various sub-options, in order to attack along the line of the following spectrum:

"1.Soviet strategic retaliatory forces-e.g., missile sites, bomber bases, submarine tenders. 2.Soviet air defenses away from cities- for example, those covering U.S. bomber routes. 3.Soviet air defenses near cities. 4.Soviet command and control centers and systems. 5.If necessary, all-out 'spasm' attack."<sup>24</sup>

In accordance with the U.S. targeting plans, the U.S. strategic posture was also revised to make it compatible with the new nuclear war-fighting strategy, which also implied a gigantic armament programme for the United States strategic forces.<sup>25</sup>

---

<sup>22</sup> Aldridge, 1983, op.cit., p.25. See also Earl C. Ravenal "Europe without America: The Erosion of NATO" in: Foreign Affairs Vol.63 (Summer 1985) pp.1020-1035, p.1025

<sup>23</sup> According to General Bernard Davis, Commander of the Strategic Air Command, quoted in William M. Arkin, "Why SIOP-6?" in: The Bulletin of the Atomic Scientists (April 1983), pp.9-10

<sup>24</sup> see Desmond Ball, Deja vu: The return to counterforce in the Nixon Administration. (California: California Seminar on Arms Control and Foreign Policy, 1975), p.12

<sup>25</sup> Between 1961 and 1967 McNamara had increased the number of ICBMs from 28 to 1054. The SLBM Polaris force was expanded from 96 missiles on 6 submarines to 656 missiles on 41 submarines. The number of nuclear weapons in the alert force increased over threefold. See Robert S. McNamara, The Essence of Security. Reflections in Office, (London: Hodder and Stoughton, 1968) pp.73-74. See also Lothar Ruehl, Machtpolitik und Friedensstrategie. (Hamburg: Hoffmann und Kampe, 1974), p.270. When he left office as U.S. Defense Secretary McNamara published a very critical assessment of his years at duty. He conceded that the numerical superiority of U.S. nuclear warheads exceeded the original planning and

U.S. Defense Secretary Robert McNamara's famous Ann Arbor speech on June 16, 1962 was the first public admission of the existence of a full-fledged counterforce strategy:

"The U.S. has come to the conclusion that to the extent feasible, basic military strategy in a possible general nuclear war should be approached in much the same way that more conventional military operations have been regarded in the past. That is to say, principal military objectives, in the event of a nuclear war stemming from a major attack on the Alliance, should be the destruction of the enemy's military forces, not of his civilian population."<sup>26</sup>

However, almost immediately following his Ann Arbor speech McNamara began retreating from his position on counterforce.<sup>27</sup> The main reasons for McNamara's withdrawal were - apart from the criticism of counterforce from within the United States, the Soviet Union and Europe<sup>28</sup> - bureaucratic motives: the Air Force was using his counterforce policy for requesting virtually open-ended strategic weapons programmes that bore no resemblance to second strike deterrents. In a memo to Kennedy in 1962 McNamara wrote:

"It has become clear to me that the air force proposals ... are based on the objective of achieving a first strike capability."<sup>29</sup>

---

even the real requirements. According to him this mismanagement was due to the dynamics of the arms race and lack of precise information. See McNamara, 1968, *op.cit.*, pp.57-58

<sup>26</sup> Cited in William W. Kaufmann, *The McNamara Strategy* (New York, Evanston and London: Harper and Row, Publishers, 1964) p.116. It was generally accepted that this address represented an abbreviated version of the speech at the May 1962 Athens meeting of NATO foreign and defence ministers, *ibid.*

<sup>27</sup> It is quite odd that the first phase of a full-fledged U.S. counterforce strategy should have been campaigned for by a man who obviously had some suspicion concerning the military function of nuclear weapons and consulted Kennedy and Johnson accordingly: "(N)uclear weapons serve no military purpose whatsoever. They are totally useless - except only to deter one's opponent from using them. This is my view today. It was my view in the early 1960s. At that time, in long private conversations with successive Presidents - Kennedy and Johnson - I recommended, without qualification, that they never initiate, under any circumstances, the use of nuclear weapons. I believe they accepted my recommendation." Robert S. McNamara, "The Military Role of Nuclear Weapons: Perceptions and Misperceptions." in *Foreign Affairs* Vol.62, No.1 (Fall 1983), p.59-80, p.79, emphasis in text

<sup>28</sup> It is also possible that McNamara was changing his mind due to his experience during the 1961- Berlin crisis and the 1962 missile crisis. See Fred Kaplan, *The Wizards of Armageddon. This is their untold story.* (New York: Simon and Schuster, 1983), pp.291-306

<sup>29</sup> quoted in Pringle/Arkin, 1983, *op.cit.* p.91

The result was a plan which mixed Soviet urban targets with counterforce options. It became known as the "damage limitation strategy" because it aimed at limiting damage to American cities in a nuclear war by destroying that portion of the Soviet missile force which might have been held back from a first strike. A description of "damage limitation" is given by Aldridge:

"Damage limitation is a tranquilizing term introduced by the Pentagon to mean counterforce. While 'damage limitation' sounds like a restrained approach to nuclear strategy it actually means limiting damage to American cities. That, of course, requires the destruction of the opponent's assault forces before they can be used. For referring to a counterforce capability on the part of the Soviets the Pentagon has coined the more aggressive-sounding term, war fighting. Both damage limitation and war fighting, however, mean the same: counterforce."<sup>30</sup>

While McNamara's official Mutual Assured Destruction (MAD) doctrine invoked "doomsday images of blowing the enemy population off the face of the earth; yet his war plans in the mid-1960s actually called for hitting the enemy's military forces first, cities second."<sup>31</sup>

During the Nixon administration counterforce made significant progress. A number of advanced weapons technology programmes were pursued which permitted greater nuclear war-fighting capability, such as a MIRV (Multiple Individual-Targeted Reentry Vehicle) and increased accuracy.<sup>32</sup> During his annual foreign policy report to Congress in 1970 Nixon introduced what was later called the doctrine of "flexibility and selectivity":

"Should the President in the event of nuclear attack be left with the single option of ordering the mass destruction of enemy civilians in the face of the certainty that it would be followed by the mass slaughter of Americans? Should the concept of assured destruction be narrowly defined and should it be the only measure of our ability to deter the variety of threats we might face?"<sup>33</sup>

Richard Nixon's Secretary of Defense, James Schlesinger, is identified with U.S. attempts at counterforce options in the seventies. Sworn in in July 1973, he started immediately approving work on a more accurate missile guidance

---

<sup>30</sup> Aldridge, 1983, op.cit. p.28, emphasis in the text

<sup>31</sup> Pringle/Arkin, 1983, op.cit., p.134

<sup>32</sup> For details see Ball, 1975, op.cit., pp.19-22

<sup>33</sup> US Foreign Policy for the 1970s: A new Strategy for Peace, a report to Congress by President Richard M. Nixon, (February 18, 1970) p.122; quoted in Aldridge, 1983, op.cit., p.30

system and funds for nuclear research and development projects in his new counterforce budget. Schlesinger confirmed publicly that assured destruction had already been outdated for a long time:

"Although several targeting options, including military only and military plus urban/industrial variations, have been a part of U.S. strategic doctrine for quite some time, the concept that has dominated our rhetoric for most of the era since World War II has been massive retaliation against cities, or what is called assured destruction"<sup>34</sup>

Thus his merit in the context of the evolution of U.S. strategy certainly lies in what he did to change American declaratory policy, since all officials had learned to talk in public only about deterrence and city attacks.<sup>35</sup>

During a Senate Hearing, U.S. Chief of Staff General Jones stated:

"General Jones: I have been involved with strategic forces since the early 1950s. We have always targeted military targets...(I)n Washington you would hear a lot of rhetoric about different strategies. We followed orders, but basically, the strategy stayed the same in implementation and targeting.

Senator Tower: Unfortunately, I am not sure that your opinion was always shared by your civilian superiors.

General Jones: I agree there have been some, including some in government, who have felt that all that we required is a mutual assured destruction capability. I am separating that from our targeting instructions to the field, approved by civilian authorities, which always included targeting military targets."<sup>36</sup>

In view of the long U.S. tradition of searching for counterforce options Desmond Ball, a researcher, asks:

"Why has it been necessary to reiterate so frequently over some two decades now that the objective of American strategic policy in the event of a strategic

---

<sup>34</sup> U.S. Department of Defense, Annual Defense Department Report, Fiscal Year 1975, (James Schlesinger), Washington D.C.: U.S.G.P.O., March 4 1974, p.33

<sup>35</sup> Schlesinger's counterforce strategy will be discussed in detail in another context, see chapter 8.2.

<sup>36</sup> Military Implications of the Treaty on the Limitation of Strategic Offensive Arms and Protocol Thereto (SALT II Treaty), Hearings before the Committee on Armed Services United States Senate, 96th-Congress, Part 1, Washington D.C.: U.S.G.P.O. (July 23,24,25,26, 1979) Part 1, p.170; in the following: U.S. Senate Hearings, Military Implications, 1979



nuclear exchange with the Soviet Union is being transformed from the destruction of Soviet cities to the destruction of Soviet military assets?"<sup>37</sup>

Dieter Senghaas also observes a continuous trend towards refinement of nuclear war-fighting deterrence from the very outset of the nuclear age. The answer to the question why these facts have not been realised earlier by a wider public and only in the early eighties would constitute a research topic of its own according to Senghaas<sup>38</sup>.

### 2.2.2. The continuation in PD 59 and Discriminate Deterrence

The next figure to address in context of the refinement of counterforce options was U.S. President Carter, who at the beginning of his presidency preferred a minimum deterrent with a submarine fleet of only 200 missiles. However, Carter "quickly shed his nuclear innocence."<sup>39</sup> He examined the SIOP and requested a guidance for nuclear weapons which provided capabilities to fight and to endure a limited nuclear war. The strategy was dubbed "countervailing" strategy.<sup>40</sup> Carter's modification of the U.S. nuclear strategy and the most explicit expression of its intentions is the famed Presidential Directive 59 (PD 59) which was regarded by the peace movement as the most telling statement of the United States' aggressive and offensive policy in the beginning of the eighties. According to Secretary of Defense Harold Brown the countervailing strategy or PD 59 called for:

"We must have forces, contingency plans, and command and control capabilities that will convince the Soviet leadership that no war and no course of aggression by them that led to use of nuclear weapons - on any scale of attack and at any stage of conflict - could lead to victory, however they may define victory...It is our policy - and we have increasingly the means and the detailed plans to carry out this policy - to insure that the Soviet leadership knows that if they chose some intermediate level of aggression, we could, by selective, large (but still less than maximum) nuclear attacks, exact an unacceptably high price in the things the Soviet leaders appear to value most -

---

<sup>37</sup> Ball, 1982/83 *op.cit.*, p.32

<sup>38</sup> Dieter Senghaas, "Noch einmal: Nachdenken über Nachrüstung", in: *Leviathan*, No.1 (1984a), pp1-27, p.6.

<sup>39</sup> Pringle/Arkin, 1983, *op.cit.*, p.132

<sup>40</sup> For a description of the development of the countervailing strategy see Walter Slocombe, "The Countervailing Strategy" in *International Security*, Vol.5, No.4 (Spring 1981) pp.18-27

political and military control, military force both nuclear and conventional, and the industrial capability to sustain a war."<sup>41</sup>

While the media insisted that PD 59 was a new strategy, Brown pointed out that it was "not a radical departure from US strategic policy over the past decade or so" and that it was only "a refinement, a codification of previous statements of our strategic policy."<sup>42</sup>

On the operational level Carter shifted Schlesinger's SIOP in respect of three aspects:

1. some of the emphasis shifted from economic targets to military targets, particularly Soviet political and leadership targets and military command and control targets;
2. it abolished Schlesinger's objective of being able to destroy 70% of the Soviet industrial base, and it required
3. that the U.S. forces be able to endure a protracted nuclear war, in dimensions of months instead of a few days.<sup>43</sup>

The aim of fighting a prolonged nuclear war required high survivability of the U.S. Command, Control, Communications and Intelligence systems (C<sup>3</sup>I). This meant that computers, satellites, radar and communication links suddenly had equal priority with missiles, submarines and airplanes.

The Reagan administration willingly inherited PD 59 and marked the evolution of the U.S. strategy by requiring that American forces had to be able not only to fight a prolonged nuclear war; they had to be prepared to prevail.

The Reagan administration continued within the tradition of U.S. nuclear strategy, but they introduced one new element: "They were saying what no one else had dared to mention for more than two decades, that no nation had contingency plans to lose wars, even nuclear ones."<sup>44</sup> The concept of winning a

---

<sup>41</sup> Harold Brown, "The Objective of U.S. Strategic Forces", Address by U.S. Secretary of Defense, Harold Brown, August 20, 1980, reprinted in Survival (Vol. 22, No.6, November/December 1980) p.267-269, p.268

<sup>42</sup> ibid, p.268

<sup>43</sup> Pringle/Arkin, 1983, op.cit., p.142

<sup>44</sup> ibid, p.192

nuclear war was intellectually portrayed by Colin S. Gray and Keith Payne's 1980 article "Victory is possible"<sup>45</sup> and militarily implemented in the 1982 Pentagon Defense Guidance for a protracted nuclear war and ideas for decapitation strikes at Soviet political and military leadership and communication lines.<sup>46</sup>

The recent request of the U.S. Commission on Integrated Long-Term Strategy "Discriminate Deterrence" will be regarded as the next crucial step in the history of the U.S. nuclear strategy.<sup>47</sup> The high-level composition of the commission suggests<sup>48</sup> that these ideas will prevail in the long run. The consistent element of the U.S. nuclear strategy is outlined in the 1988 report as follows:

"The Alliance should threaten to use nuclear weapons not as a link to a wider and more devastating war - although the risk of further escalation would still be there - but mainly as an instrument for denying success to the invading Soviet forces."<sup>49</sup>

Another element of the U.S. strategy is reflected in the emphasis on a "wider range of contingencies than the two extreme threats that have long dominated our alliance policy and force planning: the massive Warsaw Pact attack on Central Europe and an all-out Soviet nuclear attack."<sup>50</sup> This wider range of contingencies will be provided by a "capability for conventional counter-offensive operations deep into enemy territory."<sup>51</sup>

---

<sup>45</sup> Colin S. Gray and Keith Payne "Victory is possible", in: Foreign Policy, (Summer 1980) p.14-27

<sup>46</sup> New York Times, May 30, 1982, p.1 and 2. The chief authors of this document were Andrew Marshall, the RAND veteran who had worked on counterforce since the early 1950s and Fred Ikle, another former RAND strategist, as well as Richard Perle, in: Kaplan, 1983, op.cit., p.387

<sup>47</sup> For an evaluation see Helga Haftendorn, "Transatlantische Dissonanzen. Der Bericht über 'Selektive Abschreckung' und die Strategiediskussion in den USA." Europa-Archiv, No.8, April 1988, pp.213-222

<sup>48</sup> Anne L. Armstrong, Zbigniew Brzezinski, William P. Clark, W.Graham Claytor, Jr., Andrew J. Goodpaster, James Holloway, III, Samuel P. Huntington, Henry A. Kissinger, Joshua Lederberg, Bernard A. Schriever, John W. Vessey

<sup>49</sup> Fred C.Ikle and Albert Wohlstetter (Co-chairman), Discriminate Deterrence. Report of the Commission on Integrated Long-Term Strategy, (Washington D.C.: U.S.G.P.O., January 1988) p.30

<sup>50</sup> ibid, p.2

<sup>51</sup> ibid, p.2

The new element in U.S. nuclear policy is that counterforce options have to be combined with active and passive defence. Gray and Payne explained why a clear strategic objective, fancy targeting options and accurate nuclear strikes make no difference unless they are combined with defence:

"(I)t would not be in the interest of the United States actually to implement an offensive nuclear strategy no matter how frightening in Soviet perspective, if the U.S. homeland were totally naked to Soviet retaliation."<sup>52</sup>

The ambitious plans of the SDI-project are regarded as a remedy to the problems caused by the Soviet Union's capability to retaliate. The panel report stated:

"In a war with the Soviet Union we cannot count on space being a sanctuary; more likely, it would be a critical battlefield."<sup>53</sup>

With the SDI project the traditional idea of mutual vulnerability, as incorporated in the MAD doctrine, is finally undermined.

This refinement of nuclear war-fighting deterrence was hidden behind a stream of "befuddling terms even to those familiar with military jargon"<sup>54</sup> - terms such as first strike, counterforce, countervalue and damage limitation, limited war options, flexibility and selectivity. These terms have shown consistency ever since the beginning. However, all these expressions were catchwords for concepts of basically the same idea: the transformation of nuclear weapons into feasible instruments of U.S. foreign policy goals.

### 2.2.3. Retreat from massive retaliation

In 1957 NATO approved the details of NATO's declared strategy of massive retaliation. The document, adopted by the Military Committee and called MC 14/2, was entitled "Overall Strategic Concept for the NATO Area." Little is known about the first guidelines on how to use theatre nuclear weapons. It is assumed that MC 14/2 called for limited ground forces equipped with nuclear weapons and tasked to hold a potential attack until the retaliatory forces were

---

<sup>52</sup> Gray/Payne, 1980, *op.cit.*, p.24

<sup>53</sup> Discriminate Deterrence, 1988, *op.cit.*, p.53

<sup>54</sup> Pringle/Arkin, 1983, *op.cit.*, p.190

fully alerted.<sup>55</sup> NATO also approved MC 70, a long-term defence plan for arms requirements including those for tactical nuclear delivery systems.<sup>56</sup>

As early as 1956 the abandonment of the dogma of massive retaliation was demanded by General Maxwell D. Taylor, then Army Chief of Staff under Eisenhower.<sup>57</sup> His 1959 book "The Uncertain Trumpet" and Kissinger's 1957 book "Nuclear Weapons and Foreign Policy" can be regarded as paving the way intellectually for a reversal of massive retaliation towards flexible response. They stimulated the so-called "limited war" school with strategic analysts such as Robert Endicott Osgood who in his book "Limited War. The Challenge to American Strategy" formulated the decisive question which innumerable strategic analysts have been concerned with ever since the beginning of the nuclear age:

"How can the United States employ military power as a rational instrument of foreign policy when the destructive potentialities of war exceed any rational purpose?"<sup>58</sup>

Osgood campaigned for the concept of "limited war" as an answer to the "supreme task of American foreign policy"<sup>59</sup>. Kissinger starts out from the premise of the U.S. losses in foreign policy during the fifties which could not be prevented:

"Our capacity for massive retaliation did not avert the Korean war, the loss of northern Indo-China, the Soviet-Egyptian arms deal, or the Suez crisis."<sup>60</sup>

Kissinger suggested that power should be used subtly and with discrimination and only in accordance with specific policy objectives. Control should be

---

<sup>55</sup> see Robert de Wijk, Flexibility in Response? Attempts to construct a plausible strategy for NATO 1959-1989. Leiden, June 1989, pp.48-50

<sup>56</sup> James L. Richardson, Germany and the Atlantic Alliance. The Interaction of Strategy and Politics (Cambridge: Harvard University Press, 1966) p.49

<sup>57</sup> Lothar Rühl, 1974, op.cit., p.404

<sup>58</sup> Robert E. Osgood, Limited War. The Challenge to American Strategy (Chicago and London: University of Chicago Press, Fifth Impression 1970, 1957); p.1. Other representatives of the limited-war school: Schelling, 1960, op.cit.; Knorr, Klaus, (ed.) NATO and American Security, (Princeton: Princeton University Press, 1959)

<sup>59</sup> Osgood, 1970, op.cit., p.1

<sup>60</sup> Henry A. Kissinger, Nuclear Weapons and Foreign Policy (Boulder, Colorado: Westview Press, 1957, 1984) p.134

exercised and political considerations remain paramount, even in general nuclear war:

"Simply because we are strongest in strategic striking power, we cannot base all our plans on the assumption that war, if it comes, will be inevitably all-out. We must strive for strategic doctrine which gives our diplomacy the greatest freedom of action."<sup>61</sup>.

In order to resist Soviet challenges, a spectrum of capabilities which "should enable us to confront the opponent with contingencies from which he can extricate himself only by all-out war, while deterring him from this step by a superior retaliatory capacity" must be devised.<sup>62</sup> The implementation of superior retaliatory capacity is envisaged by Kissinger as follows:

"In the nuclear age, flexibility depends on the ability to meet the whole spectrum of possible challenges and not only the most absolute one. To be sure, the first charge on our resources must be the capability for waging all-out war, because without it we would be at the mercy of the Soviet rulers. But, while our strategic striking power represents the condition which makes possible all other measures, it cannot be the exclusive preoccupation of our military planning. Given the power of modern weapons, it should be the task of our strategic doctrine to create alternatives less cataclysmic than a thermonuclear holocaust."<sup>63</sup>

General Taylor who was selected as "Presidential Military Advisor" by President Kennedy, completely rejected the concept of massive retaliation. Upon taking office in July 1962 Kennedy appointed him Chairman of the Joint Chiefs of Staff.<sup>64</sup> Kennedy who planned a complete reappraisal of NATO strategy, was supported by his Secretary of Defense McNamara. The basic direction of Kennedy's reappraisal was to strengthen the nuclear deterrent by increasing the options on the strategic level, creating more options for conventional weapons and enhancing civilian control over nuclear weapons.<sup>65</sup>

---

<sup>61</sup> ibid. p.20

<sup>62</sup> ibid. p.144

<sup>63</sup> ibid. p.18-19

<sup>64</sup> Desmond Ball, Politics and Force Levels. The Strategic Missile Program of the Kennedy Administration (Berkeley, Los Angeles, London: University of California Press, 1980) p.81

<sup>65</sup> For a detailed description of origins of Kennedy's reappraisal of NATO strategy see Jane E. Stromseth, The Origins of Flexible Response. NATO's Debate over Strategy in the 1960s. (London and Oxford: Macmillan Press, 1988) pp.26-42

During the spring Ministerial Session of the NATO Council in Athens from 4 to 6 May 1962, McNamara introduced to his allies a few basic postulates of what came to be known as the strategy of "flexible response." Central to this strategy was the need to give decision makers military options of considerable flexibility in their response to aggression at all levels.<sup>66</sup>

One major part of his speech consisted of his explanation of the no-cities or counterforce doctrine, which he repeated publicly in his Ann Arbor speech in June 1962. In his Athens speech McNamara indicated that he wanted to reduce NATO's dependence on first use. He clarified that he did not favour a situation in which NATO's conventional deficiencies would be compensated by the Western use of nuclear weapons:

"It would be less than candid if I pretended to you that the United States ... believes that the Alliance should depend solely on our nuclear power to deter the Soviet Union from actions not involving a massive commitment of Soviet force. Surely an Alliance with the wealth, talent, and experience that we possess can find a better way than this to meet our common threat."<sup>67</sup>

McNamara's preference for a no-first use policy of nuclear weapons is expressed in his stress on the implicit dangers of tactical nuclear weapons. But at the same time he stated that "a very limited use of nuclear weapons, primarily for purposes for demonstrating our will and intent to employ such weapons, might bring Soviet aggression to halt without substantial retaliation, and without escalation."<sup>68</sup> Still the emphasis on no-first use was conceived as dominant in his strategy.

Accordingly, for the conventional level he required a force capable of establishing a serious nonnuclear defence in Europe without necessarily having to resort to nuclear weapons.

The features of McNamara's strategy of flexible response laid the foundation for NATO's strategy which was approved in 1967 with the same label: flexible response.

---

<sup>66</sup> For a historical description see David N. Schwartz, "A Historical Perspective." (1983a) in: John D. Steinbruner / Leon V. Sigal (eds.), Alliance Security: NATO and the No-First-Use Question. (Washington D.C.: The Brookings Institution, 1983), pp.5-21

<sup>67</sup> Quoted in ibid, 1983, pp.14

<sup>68</sup> Quoted in Stromseth, 1988, op.cit., p.45

### 2.3. Consistent problems in NATO's hardware decisions

A brief description of the introduction of the TNF in Europe in the fifties will serve as background to elaborate the parallels between the 1979 LRTNF decision and MRBMs deployments in Europe as well as between the plans for a Multilateral Force in the beginning of the sixties. The aim is to demonstrate the repetitive character of problems in the alliance. It will be pointed out that the Pershing-II and ground-launched cruise missile were not the first long-range nuclear theatre weapons to be deployed on European soil and in particular in the Federal Republic.

#### 2.3.1. The introduction of TNF

NATO first deployed Theatre Nuclear Weapons with the Seventh Army Corps in Europe in October 1953.<sup>69</sup> But it was not until December 1954 that the NATO Council formally approved the introduction of tactical nuclear weapons into Europe in order to compensate for Soviet conventional superiority and to signal its intention to use tactical nuclear weapons from the very outset of any war according to the strategy of massive retaliation.<sup>70</sup> At the meeting of the NATO Council held in December 1956, the governments of Britain, France, Germany, the Netherlands and Turkey requested that the tactical nuclear weapons be made available to European forces.<sup>71</sup> On April 12, 1957 it was announced that

---

<sup>69</sup> It was the 280 mm atomic cannon, followed a year later by the introduction of the Honest John and the Matador ground-launched cruise missile. See Jeffrey Record, NATO's Theater Nuclear Force Modernisation Program: The Real Issues, (Cambridge, Massachusetts and Washington: Institute for Foreign Policy Analysis, November 1981) p.13

<sup>70</sup> The New York Times generally reports the NATO meetings in detail, and in the following footnotes I use the abbreviation NYT. For this NATO Council see NYT, December 11, 1954, p.L5. NYT, December 16, 1954, p.1 and 10. "The Western Big Three seemed to be moving toward agreement on some major points. These included the use of atomic weapons by the North Atlantic alliance's forces in Europe..", NYT, December 17, 1954, p.1. NYT, December 18, 1954, pp.1-2. See also Dieter Mahncke, Nukleare Mitwirkung. Die Bundesrepublik Deutschland in der atlantischen Allianz 1954-1970, (Berlin und New York: Walter de Gruyter 1972), p.11, and Richardson, 1966, op.cit. p.39

<sup>71</sup> Robert E. Osgood, NATO: The Entangling Alliance, (Chicago: University of Chicago Press 1962), pp.129,217 and Richardson, 1966, op.cit., p.50



the U.S. would put "advanced weapons", including Honest John, Matador and Nike, at the disposal of certain allies.<sup>72</sup>

These tactical nuclear weapons were deployed with both U.S. and European forces. There are two systems under which U.S. weapons are deployed in Europe. One system envisages exclusive U.S. control as in the case of the Pershing II and the Ground-launched Cruise Missile. In the case of the second system, the United States deploys and controls the warheads of those delivery systems which are owned and operated by the European allies. Such custody is referred to as "dual-key system" or more precisely the "Program of Cooperation" (POC).

The Bundeswehr's acquisition and deployment of delivery systems for tactical nuclear weapons caused a vehement reaction among the public and in the SPD opposition, but nonetheless the Adenauer government succeeded in carrying through the decision using its majority in the Bundestag.<sup>73</sup>

---

<sup>72</sup> Richardson, 1966, op.cit., p.50. Honest John is an unguided surface-to-surface rocket; it has a range of more than 19 kms and a nuclear warhead of up to 5 kilotons, the warhead can also be used with conventional munitions; Matador is a surface-to-surface missile, with a range of 480-800 kms; it is not clear whether it is dual-capable; Nike (Ajax) has a range of 40 kms with a conventional warhead; Nike (Herkules) is a surface-to-air missile with a range of 120 km, which replaces Nike Ajax and has a nuclear or a conventional warhead.; see Helmut Schmidt, Defense or Retaliation. A German contribution to the consideration of NATO's Strategic Problem (Edinburgh and London: Oliver and Boyd, 1962) pp.222-225

<sup>73</sup> Richardson, 1966, op.cit., p.48-62

### 2.3.2. The deployment of IRBMs in the 50s and 60s

Shortly afterwards, in December 1957, NATO decided that intermediate-range ballistic missiles (IRBM)<sup>74</sup> should also be put at the disposal of the Supreme Allied Commander (SACEUR).<sup>75</sup>

Some European governments were not enthusiastic about having intermediate-range ballistic missiles which would be seen as first-priority targets in the event of war.<sup>76</sup> The Federal Government was never formally asked by General Norstad to participate in the IRBMs deployments, since Norstad anticipated its rejection. The German Chancellor Konrad Adenauer did not seem to welcome the decision to deploy IRBMs in Europe; one reason might have been that he hesitated to provoke the Soviet Union by deploying nuclear weapons on West German soil.<sup>77</sup> On the other hand the Federal Government did not doubt the military requirement of IRBMs to counter the Soviet MRBMs.<sup>78</sup> During 1959 and 1960 the "Thors" and "Jupiters" were deployed under dual-key operation in Italy, England and Turkey with sufficient range to hit the Soviet Union.<sup>79</sup> The

---

<sup>74</sup> According to the superpowers' agreement in SALT-I, intermediate-range missiles have a range of up to 5500 kms, while intercontinental missiles exceed the range of more than 5,500 kms, see Walther Stützle, Politik und Kräfteverhältnis, (Mittler & Sohn: Herford 1983) p.113. For the shift in terminology from LRTNF to INF, and all other issues concerning the NATO Dual-Track decision, see Hans-Jürgen Neuman, Kernwaffen in Europa. NATO-Doppelbeschluss - Rüstungskontrolle - Glossar (Bonn: Osang Verlag, 1982) p.107

<sup>75</sup> The NATO defence area is divided into three separate regional commands: the Atlantic Ocean Command, European Command and the Channel Command plus a regional group for the North American area

<sup>76</sup> see Richardson, 1966, op.cit. p.50. Britain, Italy and Turkey expressed willingness to accept the deployment of the missiles on their soil, but France, Greece, Belgium and the Netherlands refused to commit themselves, while Norway and Denmark expressed the hope that they would not be asked to accept the missiles, and Germany maintained silence. Osgood, 1962, op.cit., p.222

<sup>77</sup> For this episode see Meier, 1986, op.cit., pp.150-166

<sup>78</sup> Uwe Nerlich, "Die nuklearen Dilemmas der Bundesrepublik Deutschland", Europa-Archiv, No.17, 1965, pp.637-652, here p.646

<sup>79</sup> see Communique of the meeting of the Heads of Government in December, 16-19, 1957, in NATO. Texts of Final Communiques 1949-1974. Issued by Ministerial Sessions of the North Atlantic Council, the Defense Planning Committee and the Nuclear Planning Group (Brussels: NATO Information Service) p.113. Both missiles were liquid-fueled, had 2,400 km range and were stationed above ground; see Schwartz, 1983, op.cit., p.63

deployment of the "Jupiters" and "Thors", i.e. of the deployment of land-based IRBMs with range to hit the Soviet Union, was a difficult topic in the fifties and sixties: it was one factor which caused the Cuban missile crisis in 1962.

In 1963, 60 U.S. Polaris sea-launched intercontinental ballistic missiles as well as Britain's nuclear V-bomber and Polaris force were assigned to SACEUR. Thus the obsolescent Thors and Jupiters were replaced, which were phased out in that same year due to their technological deficiencies.<sup>80</sup>

In 1967, when NATO officially approved the strategy of flexible response, the United States began to deploy F-111 medium-range all-weather strike aircraft in Great Britain<sup>81</sup> as part of the Forward Based Systems (FBS). The term FBS refers to American forward-based nuclear delivery systems in Europe capable of striking the Soviet Union.<sup>82</sup>

A long-range cruise missile, the Mace B, was deployed on German territory from 1962 to '69. 96 Mace missiles were deployed in hardened and dispersed sites, with a range of 2,500 kilometres and a high yield warhead. They were targeted by the U.S. Strategic Air Command (SAC) and deployed exclusively on German soil.<sup>83</sup> In 1969 Mace missiles were withdrawn from European territory. Thus until 1969 ground-launched IRBMs were deployed in Europe. In 1962 the

---

<sup>80</sup> see Cartwright/Critchley, 1985, op.cit., pp.5-6. The withdrawal might also be interpreted as a result of the agreement between Khrushchev and Kennedy in the aftermath of the Cuba crisis. However, Osgood's description gives clear indication that technical deficiencies played the main role for the missiles: "However, these missiles suffered the great military and political liability of being so vulnerable and slow-firing as to be virtually useless for anything except a first strike. Partly for this reason, the United States announced, in October, 1959, that it would not establish any more liquid-fuel missile bases in Europe." Osgood, 1962, op.cit., p.222 For the technical reasons see also Rühl, 1987, op.cit., p.94

<sup>81</sup> see Cartwright/Critchley, 1985, op.cit., p.6

<sup>82</sup> Raymond L.Garthoff, Detente and Confrontation. American Soviet Relations from Nixon to Reagan, (Washington, D.C.: The Brookings Institution, 1985) p.446. A more specified definition of FBS will be given in chapter 5.2.2.

<sup>83</sup> see Uwe Nerlich, "NATO: The next 30 years: Theater Nuclear Forces in Europe. Is NATO Running Out of Options?" The Washington Quarterly, vol.3. No.1 (Winter 1980), pp.100-125, p.121 and Lothar Ruehl, "Belastungen des Amerikanisch-Europäischen Verhältnisses," in Wolfgang Wagner et.al., Die internationale Politik 1979-1980, (München/Wien: R.Oldenbourg, 1983), pp.42-69, p.47

Pershing 1 was deployed in the Federal Republic, with a range insufficient to target the Soviet Union.<sup>84</sup>

The allies increasingly sought to enhance their participation and control in nuclear affairs. In particular the German government pursued a policy line of nuclear participation, because on the one hand this was regarded as essential for strengthening its role in the Alliance. And on the other hand, because nuclear participation was believed to give some control to German politicians over the circumstances in which nuclear weapons would be employed so that they might be useful in protecting German interests.

Therefore, in the beginning of the sixties, a plan appeared which aimed at increasing the participation of the European allies in nuclear issues: the idea of creating a multilaterally owned and operational force of nuclear weapons within NATO.

### 2.3.3. Parallels between the Plan for Multilateral Forces and the LRTNF decision

In 1959, the Supreme Allied Commander Europe General Norstad, advocated a force of IRBMs in addition to the Thors and Jupiters and began to speak of the need to extend the nuclear authority of NATO. This military pressure for the deployment of a separate European-based nuclear force in which the Europeans would have a greater say, coincided with the pressure from other areas. In addition to their diminishing confidence in the American strategic commitment, some Europeans were growing increasingly reluctant to accept their lack of participation in Alliance nuclear strategy and were eager to find a formula that would change this situation.

Various schemes that emerged between 1959 and 1963 aimed at extending European control of nuclear weapons and finding an arrangement which would not imply independent nuclear production and ownership but which would be more effective than the "dual-key systems".<sup>85</sup>

---

<sup>84</sup> Christopher Paine, "Pershing II: the Army's strategic weapon" in The Bulletin of the Atomic Scientists, 1980, pp.25-31. See also Record, 1981 *op.cit.*, p.21

<sup>85</sup> See Mahncke, 1972, *op.cit.*, p.72-86, Osgood, 1962, *op.cit.* pp.229-234 and Catherine McArdle Kelleher, Germany and the Politics of Nuclear Weapons, (New York, London: Columbia Press, 1975) pp.178-202

Despite the variety of ideas put forward in support of these schemes, none, except the Multilateral Force (MLF) made any significant progress. The MLF concept envisaged 25 surface ships, each ship carrying eight Polaris A-1 missiles<sup>86</sup> and staffed by multinational crews. The fleet would be assigned to the Supreme Allied Commander Europe.

While the German Government was mostly interested in the project as a means for improving its status in the alliance and "in obtaining a bigger say in nuclear strategy and targeting"<sup>87</sup>, the U.S. administration regarded it as a way of strengthening the alliance against the disintegration policy represented by de Gaulle and to impede the development of independent European nuclear forces. Thus the MLF proposal was aimed at solving the U.S. dilemma of retaining operational control over nuclear weapons systems while simultaneously enabling European allies to participate in the management of the Western nuclear deterrent assigned to NATO. For various reasons the project failed.<sup>88</sup> First of all there were important political forces in the Federal Republic which opposed the MLF plan. Defence Minister Strauß campaigned for the build-up of an independent European nuclear force. France was not enthusiastic about the plan because it strongly rejected the Federal Republic's participation. In the course of the debates the U.S. Johnson administration came to the conclusion that neither the European allies nor the U.S. Senate backed the project. Thus, realisation of the MLF did not have top priority for the United States any more.

---

<sup>86</sup> Polaris missiles are intermediate ballistic missiles with a warhead of 1 megaton and a range of 2,000 kms which can be fired from mobile launchers, and in particular from submerged submarines; they were first deployed in 1961. See Schmidt, 1962, op.cit.

<sup>87</sup> Kai-Uwe von Hassel, "The search for Consensus. Organizing Western Defense." Foreign Affairs, Vol.43, No.2, (January 1965), pp.209-216, here p.212

<sup>88</sup> Alastair Buchan, "The Multilateral Force: An Historical Perspective", Adelphi Papers, No. 13, (London: The Institute for Strategic Studies, October 1964), pp.3-14; David Schwartz, 1983, op.cit., p.82-136; Henry A. Kissinger, The Troubled Partnership. A Re-appraisal of the Atlantic Alliance, (New York, London, Toronto: McGraw-Hill, 1965) pp.127-159. For the political background of the MLF project see Roger Morgan, The United States and West Germany 1945-1973. A Study in Alliance Politics, (London: Oxford University Press, 1974) pp.122-142. See also Mahncke, 1972, op.cit., pp.129-202

There are some characteristics of this episode which are of direct relevance to the LRTNF debate 20 years later:

1. The military rationale for the MLF and LRTNF was legitimised with the need to counter the increasing number of Soviet medium-range ballistic missiles capable of striking Europe. However, these concerns were more a result of an anticipated U.S. inferiority caused by a prospective build-up of Soviet long- and medium range forces than a reaction to already existing capacities.
2. At a time when European-based nuclear strike aircraft were phased out<sup>89</sup>, Europeans started to be concerned again about the U.S. commitment to their defence.
3. Many U.S. analysts doubted the military rationale of the MLF and considered the existing U.S.-based strategic systems as sufficient to cover Soviet targets.
4. In both cases strong arguments for sea- instead of land-basing were brought forward for discussion.<sup>90</sup>

In contrast to the LRTNF case, political frustration over exclusive U.S. control of nuclear affairs played an important role in the European discussions about the MLF plans. While with its MLF offer the United States pursued the political objective of forestalling German pressures to achieve nuclear status, there is no indication that these questions of control of nuclear weapons and German desires to become a nuclear state also played a role in the LRTNF decision. However, these debates involved in the proposal for a MLF and the IRBM decision already convey some of the consistent problems which all NATO hardware decisions have to deal with: doubts in the military rationale, no consistent argument in favour for either sea- or land-basing and European concern about the U.S. nuclear umbrella. However, with NATO's adoption of flexible response these problems were rather fixed than substantially solved.

Before NATO could approve the flexible response strategy in December 1967, the allies had to be convinced of its value, SACEUR General Lemnitzer had to

---

<sup>89</sup> In 1965/66 the withdrawal of the medium-range bombers B-47 was completed. They were deployed in Spain, Great Britain and Morocco. See Hoffmann, 1986, *op.cit.*, p.92

<sup>90</sup> U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, pp.9-10

be persuaded and the withdrawal of the French from the NATO Military Structure had to be accomplished.<sup>91</sup>

---

<sup>91</sup> See for the period from McNamara's Athens Speech to NATO's adoption of the strategy Stromseth, 1988, op.cit.

### 3. Flexible Response and its Divergent U.S. and German Interpretations

The U.S. endeavours to introduce the flexible strategy into NATO in the beginning of the sixties, as expressed in McNamara's Athens speech in 1962, caused the first significant disputes between Europe and the United States on the role of nuclear weapons. The nuclear dilemma in European-American relations is rooted in the alliance's

"fundamental paradox of geography: most of NATO's ultimate deterrent, American strategic nuclear forces, resides an ocean away from the likely point of attack."<sup>1</sup>

Thus, the reason for these conflicts and the preference for one or other interpretation as between the superpower and its allies is based on the different geographical position of the interpreter: while apart from Norway the Federal Republic is the only NATO member who shares a common frontier with the Warsaw Pact, the United States is thousands of kilometres distant from NATO's main opponent and from its European allies who are assured to be protected by the nuclear umbrella of the United States. Their different geographical positions caused diverging interpretations of the role of nuclear weapons through the United States and the Europeans. These different interpretations were not only subject to an intellectual debate within the strategic community, but were largely responsible for long-standing conflicts between Europe and the United States concerning the character of NATO strategy.

While Europeans, have been more concerned with the nuclear weapons' function of deterrence by retaliation and the escalating character of the strategy, the United States stresses more the usability, the war-fighting character of the flexible response strategy. The European "interpretation" asks for an early commitment of U.S. strategic forces and would like to make the United States commit itself to use its strategic forces as early as possible, while the United States must be interested in postponing the use of nuclear weapons against Soviet territory as long as possible, since employment of nuclear weapons would make a Soviet retaliatory strike against U.S. territory probable and result in the destruction of the United States. Contrary to the Americans, the Europeans are not interested overmuch in the battlefield use of nuclear

<sup>1</sup> Gregory F. Treverton. "Managing NATO's Nuclear Dilemma." International Security, (Vol.7, No.4, Spring 1983), pp.93-115, p.93



weapons, since the battlefield would most likely be Europe itself. This clash of interests caused by the two continents' different geography is so obvious that strategic studies start from this dilemma as a premise. In official NATO language it is expressed in the following way:

"As the nuclear 'provider' for the Alliance, the United States has been required to consider what would happen if deterrence failed. This has led to the development of a range of options that make the threatened use of nuclear weapons believable and that provide possibilities other than the unthinkable, and therefore incredible, option of an all-out nuclear response. Credibility and usability have become inseparable elements of nuclear deterrence... As the 'protected', the Europeans have not always felt the same urge to look beyond deterrence to the possible use of nuclear weapons in war. They have been concerned more with absolute deterrence - the threatened use of nuclear weapons - than with what could happen if deterrence were to fail."<sup>2</sup>

Since then, Europe and the United States have always been obliged to find a compromise in NATO between these –partly incompatible– interpretations of nuclear weapons' role.<sup>3</sup> Those divergent U.S. and European interpretations of flexible response have been responsible for long-standing disputes in the Nuclear Planning Group on the first and follow-on use of the TNF. For the United States the employment of TNF only makes sense if they reduce the threat of a general escalation and the danger of destruction of American territory - thus, if they provide war-fighting capabilities. They prefer concepts of TNF as an adjunct to conventional weapons in an "integrated battlefield." The Europeans and in particular the Germans can only pray that the war will be terminated merely by the threat to use nuclear weapons before Europe is destroyed. Still, it is assumed in NATO that these different interpretations can be reconciled. Peter Stratmann is optimistic and denies any incompatibility of the interpretations:

"Es bleibt festzuhalten: die unterschiedlichen Präferenzen, die die NATO-Staaten in der Debatte um die Auslegung und Weiterentwicklung der Bündnisdoktrin verfolgen, setzten sich nicht - wie häufig behauptet - in unvereinbare nationale Strategien um. Die Frage ist also weniger, wessen nationales Interesse sich durchsetzen würde. Entscheidend ist vielmehr, wie die amerikanische Führung und die westeuropäischen Regierungen angesichts der

---

<sup>2</sup> Cartwright/Critchley, 1985, op.cit., p.6, emphasis in the text. Similar sections can be found in almost every work on flexible response and the evolution of U.S. and NATO strategy. Here are only a few examples: Sigal, 1984, op.cit., p.14-19., U.S. House of Representatives Report, Modernization, 1980, op.cit., p.11/12. Afheldt, 1976, op.cit., pp.164-208

<sup>3</sup> For an early critical evaluation of flexible response that emphasises its contradictions, see Erhard Rosenkranz / Rüdiger Jütte, Abschreckung contra Sicherheit (München: R. Piper & Co., 1974) pp.36-77

Ziel- und Ziel/Mittel-Konflikte, mit denen im Ernstfall jede für sich konfrontiert wäre, ihr strategisches Interesse definieren würden. Vieles spricht dafür, daß es dabei unter dem Zwang der Umstände zu einer viel weitergehenden Annäherung der Auffassungen käme, als die durchwegs skeptischen Darstellungen westlicher Analytiker erwarten lassen."<sup>4</sup>

Since NATO is able to come up with mutually agreed hardware decisions, it is obviously possible to reconcile these different interpretations. Thus the point of fracture has to be determined, where these different, but compatible strategies turn into incompatible concepts.

After the description of flexible response the reaction in the Federal Republic on its introduction will be described with special attention to the foundation of the Ebenhausen Institute. Subsequently the different levels will be analysed in which these different guidelines are manifested: a) two incompatible first use concepts on an operational level and b) an incoherent NATO TNF posture on the level of military programmes. A detailed description of NATO's employment system for nuclear weapons clarifies that these inconsistencies are not even clarified on the level of actual employment planning.

### 3.1. Description of Flexible Response

The most important shift in the replacement of massive retaliation with McNamara's "flexible response" was its clear postulation of an initial response to a significantly broader range of aggressions with conventional weapons. But, "not only was flexible response a U.S.-developed doctrine, it was largely a U.S.-imposed doctrine."<sup>5</sup> Thus it took fully six years until NATO officially approved the strategic revision which McNamara and Kennedy had envisaged in 1961.

---

<sup>4</sup> "The following must be borne in mind: the different preferences pursued by the NATO nations in the debate on the interpretation and development of the Alliance doctrine do not result, as often maintained, in incompatible national strategies. Thus the question as to whose national interest would prevail is of little relevance - rather, the decisive factor is how the U.S. leadership and the Western European governments would define their strategic interests in view of the aim and the aim/means conflicts where both strategies were confronted within a case of emergency: There are many reasons to believe that under the force of circumstances there will be a much greater convergence of interpretations as the consistently sceptical presentations of Western analysis would lead us to expect." Stratmann, 1981, *op.cit.*, p.71/72

<sup>5</sup> Emphasis in the text: Richard Hart Sinnreich, "NATO's Doctrinal Dilemma", *Orbis*, No.19, 1975, pp.461-476, here p.462

The actual text of the still valid 1967 document, known as MC 14/3 (Military Committee) has never been made public. The vagueness of flexible response has existed from the day the doctrine was adapted. However, there has been consensus that this ambiguity was necessary in order to allow the American and European allies "sufficient scope"<sup>6</sup> to interpret the strategy according to national preferences.

According to the West German White Paper flexible response embodies three types of response:

"Direct Defence is to prevent the aggressor - at the level of military conflict chosen by him - from achieving the objective. This may include the use of nuclear weapons. As a result, either the aggression fails or the aggressor is confronted with the threat of escalation. Deliberate Escalation is intended to repulse an attack by persuading the aggressor to take the political decision to cease hostilities, since his prospects of success and the risk he is running are no longer in an acceptable ratio. As a potential means of convincing him of such fact, the Alliance preserves the options of the politically controlled, selective use of nuclear weapons. General Nuclear Response is directed mainly against the aggressor's strategic potential, and means using the Alliance's strategic nuclear weapons. This threat is the most powerful deterrent; its use would be the most powerful of NATO's possible responses."<sup>7</sup>

Flexible Response incorporates some indispensable elements. One essential element is forward defense: "Forward defense is defined as a coherent defence conducted close to the intra-German border with the aim of losing as little ground as possible and confining damage to a minimum."<sup>8</sup>

A second element refers to the NATO triad which means that there exists an interlocking combination between conventional forces, short-range, intermediate-range and strategic forces: "The three elements are complementary, but none of them can substitute for another."<sup>9</sup> Flexible Response is also based on the principle of incalculability, which means that the strategy deliberately leaves the question open "of when what response is to be

---

<sup>6</sup> Legge, 1983, *op.cit.*, p.9

<sup>7</sup> Federal Minister of Defence, White Paper 1983. The Security of the Federal Republic of Germany (Bonn: Federal Minister of Defence, 1983), pp.145-146, emphasis by S.P

<sup>8</sup> Federal Minister of Defence, White Paper 1979. The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces (Bonn: Federal Minister of Defence, 1979) p.126

<sup>9</sup> White Paper 1983, *op.cit.* p.146

expected ...so as to confront an enemy, in the eventuality of aggression, with a risk he cannot afford to run".<sup>10</sup>

However, this incalculable response should be at a level appropriate to the nature and the scale of the attack. In order to avoid defeat, NATO declares its willingness to escalate the level of violence, incorporated in the concept of "deliberate escalation." This willingness to escalate the conflict deliberately included a provision that NATO reserved all rights to be the first party in a conflict to fall back upon the use of nuclear weapon, called NATO's "first use" concept:

"The answer offered by flexible response is that security against any sort of military blackmail is provided by a capacity to respond militarily at a level appropriate to the nature and scale of the threat offered; and, if necessary to avoid defeat, to escalate the level of violence. This, it has always been understood in NATO (if not always willingly faced) includes the possibility of initiating the use of nuclear weapons."<sup>11</sup>

Thus the concept of "deliberate escalation" will be implemented by NATO's first use of nuclear weapons.

Since its official adoption the flexible response strategy has been the target of numerous and varied criticisms. Among the analysts of the strategic community it is a commonplace to complain about the strategy's vagueness and to regard it more as a political compromise than a consistent military strategy. Lawrence Freedman identifies the scope it gives decision makers for avoiding difficult hardware choices as the strategy's main function:

"Flexible response has allowed this system to continue because its prime political attribute - that it can mean all things to all men - is a serious military failing. ... The attempt to deter conventional aggression in Europe with a nuclear arsenal controlled by a non-European power that is itself subject to nuclear retaliation has never appeared to be an example of political or military rationality..."<sup>12</sup>

A German analyst describes the European and U.S. perceptions of flexible response as follows:

---

<sup>10</sup> *ibid*

<sup>11</sup> Paul Buteux, Strategy, Doctrine, and the Politics of Alliance. Theater Nuclear Force Modernisation in NATO (Boulder, Colorado: Westview Press, 1983a) p.74

<sup>12</sup> Lawrence Freedman, "NATO Myths" in: Foreign Policy (Winter 1981/82) pp.48-69, pp.50,64

"Die Europäer glaubten, die USA dazu überredet zu haben, einen frühen Einsatz von Atomwaffen gegen einen konventionellen Angriff nicht ganz auszuschließen; die USA gaben sich damit zufrieden, daß sie den Europäern ihre Zurückhaltung in der atomaren Frage unmißverständlich dargelegt hatten und bauten im übrigen darauf, daß sie das Heft gegenüber der NATO in der Hand behalten würden, falls es zur atomaren Eskalation käme."<sup>13</sup>

The Europeans' reaction towards the introduction of the flexible response strategy certainly cannot be described as enthusiastic. Brodie describes the ulterior motives for NATO's settling of the conflict:

"What ended most of this debate was not at all the triumph of pure reason but, first, the sit-down strike of our NATO allies, who after many painful meetings with Secretary McNamara and his representatives rediscovered the utility of giving lip service to ideas with which they had no intention of conforming, and second, the increasing absorption of the United States in Vietnam."<sup>14</sup>

### 3.2. Reactions in the Federal Republic

The announcement of flexible response stimulated a strategic debate in the Federal Republic which resulted in establishing institutionalised forms for research and for an exchange of views on strategic matters.

#### 3.2.1. German parties

The two major political parties in the Federal Republic, the Social Democrats and the Christian Democrats, reacted quite differently to these changes in the U.S. strategy. While the SPD opposition welcomed the shift in U.S. strategy, the governing Christian Democrats and Social Christians were strongly opposed to the "McNamara strategy". Their opposition to a strategy with a more

---

<sup>13</sup> "The Europeans thought they had convinced the United States not to exclude completely the early use of nuclear weapons against a conventional attack; the United States were content to have pointed out unmistakably to the Europeans that they would exercise restraint in this respect and counted on holding the reins in NATO in the event of nuclear escalation." in: Christian Krause, Kann die NATO auf den Erstgebrauch von Atomwaffen verzichten? Anmerkungen zur sicherheitspolitischen Debatte in der Bundesrepublik und in den USA (Bonn: Friedrich-Ebert-Stiftung, November 1985) p.17. See also Gregory Trevorton, Nuclear Weapons in Europe (London: International Institute for Strategic Studies, Adelphi Papers No.168, 1981)

<sup>14</sup> Bernard Brodie, War and Politics (London: Cassell and Collier Macmillan Publishers, 1973) p.405

conventional emphasis must also be considered in the context of a second intertwined issue which produced considerable strains on American-German relations in this period: the question of access to nuclear decision-making and physical control-sharing. The government's opposition was headed by Franz-Josef Strauß, who was appointed as the head of the newly created Ministry of "Atomic Affairs" by October 1955. By October 1956 he took office of the Minister of Defense, which he headed for the next six years.<sup>15</sup> His personal investment and "outspoken pursuit of a major nuclear role for Germany"<sup>16</sup> certainly had to be seen in context of his simultaneous advocacy of an important defense role for tactical nuclear weapons. Thus Strauß and many of his partisans strongly opposed the tendencies in the Kennedy administration, to modify the strategy towards a conventional emphasis and thus to renounce the first use of nuclear weapons.<sup>17</sup> Strauss argued that NATO was too weak conventionally to maintain a forward defense at the inner border. The existence of TNF and the threat to use them early would be a necessary deterrent.

Chancellor Adenauer had only reluctantly accepted NATO's strategy of massive retaliation and some years later he was again requested to change position. A sober reception on the part of the German government was certainly also impeded by the ignorance of German officers who did not have the basic knowledge to understand the American proposals or did not study the documents on which McNamara's documents were based.<sup>18</sup> The change in the attitude within the Christian Democratic government came with Kai-Uwe von Hassel, who succeeded Strauß as Defence Minister and with Ludwig Erhard, Adenauer's replacement as Chancellor. The new cabinet members belonged to the "Atlanticists" in the party and looked for a close cooperation with President Johnson and McNamara.

---

<sup>15</sup> see Kelleher, 1975, op.cit., p.65. In German, Strauß' title was that of "Bundesminister für Atomfragen". Strauß left the Adenauer cabinet on November 19, 1962 as a result of the famous "Spiegel-Affäre" and joined the government again on December 1, 1966 as Minister for Financial Affairs. See Datenhandbuch zur Geschichte des Deutschen Bundestages 1949-1982, (Baden Baden: Nomos, 1984), pp.306, 397, pp.1060-1967

<sup>16</sup> Kelleher, 1975, op.cit., p.200

<sup>17</sup> For a detailed discussion of Franz-Josef Strauß' strategic views and nuclear policy see also Richardson, 1966, op.cit., p.75-83 and Thomas Enders, Franz Josef Strauß - Helmut Schmidt und die Doktrin der Abschreckung (Koblenz: Bernard and Graefe, 1984)

<sup>18</sup> see Kelleher, 1975, op.cit., p.174

As opposed to the CDU, the SPD "once again"<sup>19</sup> immediately adopted American strategic arguments; SPD as well as FDP spokesmen accepted the American view that strengthening conventional forces was of mutual interest to both the Federal Republic and the United States. The SPD's approval, in particular of the strong emphasis on conventional forces within flexible response, has to be viewed in the context of the party's vehement opposition to nuclear weapons demonstrated in its "Kampf dem Atomtod" (Fight Atomic Death) campaign during the fifties. Authoritative SPD politicians such as Fritz Erler and Helmut Schmidt adopted the criticism of massive retaliation strategy and looked for a solution to the alternative between "suicide or capitulation."<sup>20</sup>

The SPD experts rejected any nuclear automation, advancing the more than suitable metaphor that it was not realistic for the Europeans to believe "that they were the tail which the American Atom dog is wagging."<sup>21</sup> The Social Democratic politicians' adoption of the new U.S. strategy was due to their close contact with intellectuals of the Kennedy administration. Close contacts between Fritz Erler and Paul Nitze guaranteed a direct exchange of ideas. Helmut Schmidt was obviously influenced by protagonists of the flexible response strategy such as Maxwell Taylor and Henry Kissinger. Thus Kissinger's and Taylor's pioneering studies for the introduction of the flexible response strategy were well known to the SPD's security experts and interpreted by means of first hand information. Helmut Schmidt's book "Defense and Retaliation" expressed the SPD's expectations with regard to the strategy in a most explicit manner. The book, which is regarded as a plea for the introduction of flexible response and its first presentation to the German public, was published in spring 1961, i.e. some months before McNamara presented the new strategy in his Ann Arbor speech.

---

<sup>19</sup> see Kelleher, 1975, op.cit., p.159

<sup>20</sup> Fritz Erler in an interview with the "Bayerischer Rundfunk", January 9, 1963 quoted in "Lothar Wilker, Die Sicherheitspolitik der SPD 1956-1966. Zwischen Wiedervereinigungs- und Bündnisorientierung. (Bonn-Bad Godesberg: Neue Gesellschaft, 1977) p.169

<sup>21</sup> "'Europa kann nicht der Schwanz sein, mit dem der amerikanische Atomhund wedelt.'" Fritz Erler "Abschreckung muß glaubwürdig sein" in: Christ und Welt, December 21, 1962, quoted in Wilker, 1977, op.cit., p.176

### 3.2.3. Institutionalising of Research: the Ebenhausen Institute

Up to the beginning of the sixties, research and discussions on strategic issues were not yet institutionalised in the Federal Republic.<sup>22</sup> This situation was changed in 1962 by the establishment of a German think tank called "Stiftung, Wissenschaft und Politik" (Science and Politics Foundation).

In 1960, Klaus Ritter, an active service officer, was urged by Henry Kissinger and Professor Arnold Wolfers to open an institute in order to provide a board of consultation for German government agencies, political parties, research institutes and the media and to serve as a place for contact between international experts on security and political matters.<sup>23</sup>

The Institute, which was set up in 1962 as a private law foundation and then as a research institute in 1965, is almost better known internationally than in Germany itself.<sup>24</sup> It works in cooperation e.g. with the RAND Corporation in Santa Monica, the London Institute of Strategic Studies, the Moscow Institute for International Economics and Politics, and the Carnegie Foundation in the United States. The Ebenhausen Institute employs 110 researchers; there are posts for 20 to 30 guest researchers who work on questions of defence, economics and social science, and new technological developments. Nine-tenths of the institute's funds (total budget in 1987: roughly DM 11m plus DM 1-1.5m "outside funds"), are provided from the budgets of the Office of the

---

<sup>22</sup> for this period see Lothar Wilker, 1977, op.cit., pp.158-222, and Helga Haftendorn, Abrüstungs-und Entspannungspolitik zwischen Sicherheitsbefriedigung und Friedenssicherung. Zur Außenpolitik der BRD 1955-1973 (Düsseldorf: Bertelsmann Universitätsverlag, 1974), pp.66-68

<sup>23</sup> Klaus Ritter, who headed the research institute until spring 1988, had set up the department in the Wehrmacht's Supreme Command responsible for analysing the strength and state of the Soviet armed forces during World War II. Afterwards he became a member of the German intelligence service and head of the service's Department for Political Evaluation

<sup>24</sup> The institute's council comprises members of parliament representing all political parties (excluding the Greens), and representatives of the Federal Chancellery, different ministries, the Bavarian State Government, researchers and leading personalities of the economy. Herbert Wehner participated in the first council, Helmut Schmidt joined it later. Georg Leber, Werner Heisenberg, Carl Friedrich von Weizsäcker, and Generals such as Hans Speidel and Ulrich de Maziere are other former members of the Council. Michael Groth, "Unabhängig, doch weit ab von der Macht. Die 'Stiftung Wissenschaft und Politik'", Frankfurter Allgemeine Zeitung, April 21, 1987



Federal Chancellery, the Bonn Foreign Office and the Defence Ministry.<sup>25</sup> Many researchers work with the highest security authorisation, some even with the highest clearance level "Atomal". The Institute's role has often been compared to that of the RAND Corporation in the United States <sup>26</sup>, since its main task lies in the field of policy consulting. Nevertheless, the Institute's independence is praised in the media<sup>27</sup>. The Institute's self-proclaimed goal is to identify relevant questions and to be able to provide politicians with answers when the questions do become relevant. An ideal example for this procedure exists in the Non-Proliferation Treaty; the Ebenhausen researchers were able to provide the relevant questions when the new Socialist Liberal government was confronted with the treaty's first draft <sup>28</sup>.

The Bonn administration and the Institute contact each other through a "cooperation office" in Bonn. Colloquies in Ebenhausen offer an occasion for meetings between members of the Federal Chancellery, the Foreign Office and the Ministry of Defence, who are otherwise subject to institutional barriers which hinder contact between them. Members of the ministries consider the SWP reports as policy advice. Politicians of the Social Democratic Party, in particular, maintain intensive contact with Ebenhausen.<sup>29</sup>

Contemporarily to the foundation of Ebenhausen it was again the Socialdemocratic politician Helmut Schmidt who stimulated the idea of regular conferences and meetings in all the main NATO countries among members of the international defence community. He suggested that officers on duty, civil

---

<sup>25</sup> Theo Sommer, "Think-tank's 25 years of 'opening intellectual doors'." German Tribune, October 11, 1987, p.5. Translation of Theo Sommer's Article, "Politikberatung in Deutschland", Die Zeit, (Vol.25, October 2, 1987)

<sup>26</sup> "Mittlerin zwischen Theorie und Praxis. Die Stiftung Wissenschaft und Politik in Ebenhausen aus Schweizer Sicht". Neue Züricher Zeitung, March 24, 1988

<sup>27</sup> see Josef Joffe: "Weltweit anerkannte Forschungsstätte. Die Stiftung Wissenschaft und Politik feiert ihr 25jähriges Bestehen". Süddeutsche Zeitung, October 3, 1987

<sup>28</sup> Günther Gillessen, "Über den Umgang mit Planungsstäben und Gedanken-Fabriken". Frankfurter Allgemeine Zeitung, January 10, 1988, (supplement No.8)

<sup>29</sup> e.g. Dietrich Stobbe, Johannes Rau, Hans-Jürgen Wischnewski and Karsten Voigt see Groth, 1987, op.cit. For the statute of the foundation see Ulrich Lohmar, Wissenschaftsförderung und Politikberatung, (Bielefeld: Bertelsmann Universitätsverlag, 1968) p.202-205

servants and journalists should be included as well.<sup>30</sup> Since Helmut Schmidt gave birth to these meetings, he can be regarded as a pioneer of the German "strategic community".

The expression "strategic community" was coined by Weseley W. Posvar, a researcher at the Massachusetts Institute of Technology, to describe the continuous process of discussion among the U.S. strategic specialists as well as a wider scientifically oriented public.<sup>31</sup> An important centre of these U.S. strategic specialists or defence intellectuals is the RAND Corporation as the birthplace of the strategic community in the late fifties<sup>32</sup>.

The term "strategic community" is usually not only applied to researchers of think tanks such as RAND but also to bureaucrats and civil servants in ministries and governmental administrations as well as military men who participate in the intellectual debate by attending conferences or by their contributions to the innumerable periodicals and magazines which discuss these issues. In this thesis the term "strategic community" is used according to this broader sense. Part of this German "strategic community" considered as its duty to operationalise the guidelines following from the German interpretation of flexible response.

---

<sup>30</sup> Helmut Schmidt, "Probleme der militärischen Strategie", Die Neue Gesellschaft, (Vol.12, No.2, March/April 1965) pp.616-628, here p.628

<sup>31</sup> Gerhard Brandt and Ludwig von Friedeburg, Aufgaben der Militärpublizistik in der modernen Gesellschaft, (Frankfurt, 1966) p.15 quoted in Reinhard Mutz, Sicherheitspolitik und demokratische Öffentlichkeit in der BRD. Probleme der Analyse. Kritik und Kontrolle militärischer Macht, (München, Wien: R. Oldenbourg Verlag, 1978) p.126

<sup>32</sup> "The whole conception of modern warfare, the nature of international relations, the question of world order, the function of weaponry had to be thought through again. Nobody knew the answers; initially, not many had even the right questions. From these ashes an entire intellectual community would create itself, a new elite that would eventually emerge as a power elite, and whose power would come not from wealth or family or brass stripes, but from their having conceived and elaborated a set of ideas. It was, at the outset, a small and exceptionally inbred collection of men - mostly economists and mathematicians, a few political scientists - who devoted nearly every moment of their workaday thoughts to thinking about the bomb: how to prevent nuclear war, how to fight nuclear war if it cannot be deterred." Fred Kaplan, 1983, op.cit., p.10

### **3.3. Divergent national doctrines (U.S./FRG)**

Due to the different geography the strategy of flexible response calls for very different national interpretations. These different interpretations of the United States and Europe will be set against each other. The result of these interpretations are divergent national guidelines which shape each nation's specific strategic nuclear policy and influence decisions on force development, composition, size and basing mode of nuclear weapons and arms control policy. Also the U.S. force employment or action policy, i.e. how the United States would actually use its strategic forces as well as U.S. operational policy, derive from these doctrines that have originated in the interpretation of flexible response. The focus of these different doctrines is the role of nuclear weapons and thus the everlasting disputable question among the NATO allies of when, how and with what to cross the nuclear threshold. The different perception of the nuclear weapons' role result in the following guidelines:

While the United States stresses the conventional component of the strategy, the Europeans prefer a nuclearisation of the strategy.

For the Germans nuclear weapons have a strategic value, while the U.S. stresses the tactical and battlefield character of nuclear weapons.

The Germans envisage a "political" use of nuclear weapons in order to demonstrate to the Soviet Union NATO's willingness to escalate, while the United States prefers to employ nuclear weapons with a military purpose, as a last resort.

These different notions of the role of nuclear weapons result in two different, incompatible first use concepts which will be explained in detail.

#### **3.3.1. Nuclear versus Conventional**

There is consensus in the transatlantic strategic community that the U.S. should pursue a policy line of raising the nuclear threshold and, if possible, to regionalise and conventionalise a war in Europe. The Federal Republic, however, prefers to lower the threshold as much as possible precisely in order to prevent a protracted conventional war on European soil.<sup>33</sup>

---

<sup>33</sup> "Die USA sind daran interessiert, einen Krieg in Europa, wenn er sich nicht vermeiden läßt, zu regionalisieren und zu konventionalisieren, weil alles andere,

The basic clash of interests between the two nations, due to the Alliance's fundamental paradox of geography and the resulting different risks for both nations concerned are also pointed out by the White Paper 1975/76:

"Die mit der NATO-Strategie verbundenen Risiken sind für die europäischen und die transatlantischen Bündnispartner unterschiedlich. Mit dem Einsatz nuklear-strategischer Mittel bringen sich die USA in Gefahr, ihr eigenes Territorium einer korrespondierenden Waffenwirkung der Gegenseite auszusetzen. Westeuropa hingegen, vor allem die Bundesrepublik Deutschland, würde schon vor einer Eskalation bis zur nuklear-strategischen Stufe Schlachtfeld eines Krieges sein, der mit konventionellen und womöglich auch mit nuklear-taktischen Mitteln geführt wird."<sup>34</sup>

The persistent dilemma, or, rather, contradiction, implied in NATO's strategy is that the Europeans are more deterred than the United States since the employment of TNF is much more probable than the use of strategic weapons. Thus, the Federal Republic in particular would suffer a much higher level of destruction than both Soviet Union and the United States. Therefore the Federal Republic pursues a policy of limiting the damage by an early war termination.

On a declaratory level, the Federal Republic declares its willingness to build up conventional forces to an extent which obviates the use of nuclear weapons.<sup>35</sup> In

---

insbesondere die Nuklearisierung des Krieges, Folgen für das amerikanische Mutterland nach sich ziehen könnte. Die Europäer ihrerseits bestehen darauf, diese Folgen geradezu automatisch eintreten zu lassen, indem sie für eine möglichst niedrige Atomschwelle und für einen geringen konventionellen Aufwand plädieren." (It would serve U.S. interests to regionalise and conventionalise a war in Europe; this is inevitable because anything else, in particular a nuclearisation of the war, would have consequences for the American homeland. The Europeans insist on evoking these consequences almost automatically since they favour as low a nuclear threshold as possible and low conventional expenses.) Ernst Otto Czempel, "Konventionell oder nuklear? Langfristige Aspekte der aktuellen Debatte", in: Die Neue Gesellschaft (Vol.30, No.2, February 1983), pp.150-154, p.151. See also Trevorton, 1983, *op.cit.*, p.93

<sup>34</sup> "The risks inherent in NATO strategy are different for the European and transatlantic allies. By employing nuclear-strategic means, the United States risks to provoke a corresponding attack on U.S. territory by the opponent. Western Europe, however, the Federal Republic of Germany in particular, would be the battlefield of a war fought by conventional and possibly tactical nuclear weapons before the strategic level of fighting was to be reached." Bundesminister der Verteidigung, Weißbuch 1975/76. Zur Sicherheit der Bundesrepublik Deutschland und zur Entwicklung der Bundeswehr (Bonn: Presse- und Informationsamt der Bundesregierung, 1976), pp.22-23

<sup>35</sup> "Die Bündnispartner müssen mit starken konventionellen Kräften in Europa dafür sorgen, daß möglichst kein Zwang zum Einsatz nuklearer Waffen entsteht." ("The

reference to the force development level, however, this dilemma results in the Federal Republic's reluctance to meet U.S. requests to strengthen its conventional forces; an effective conventional capacity increases the danger of a prolonged conventional war which would be fought on the German soil as the battlefield.<sup>36</sup> A relentless adherence to and strengthening of NATO's principle of forward defence is regarded as a way out of this predicament.<sup>37</sup>

However, this reluctance in respect to conventionalisation of the strategy does not mean that the Federal Republic has neglected its NATO duties. The Bundeswehr provides West Europe's largest conventional army with 495.000 soldiers and has doubled its annual conventional expenditure from 1970 to 1977.<sup>38</sup> However, the Federal Republic's yieldings to U.S. exhortations to provide more conventional forces in Europe and its demonstrated willingness to take over a greater share of the burden are based on mainly political considerations. The Germans were concerned to prevent the risk of extensive U.S. troop reductions in Europe, the most decisive expression of the U.S. commitment to the defence of Europe. Considerations of U.S. troop reductions were caused by the Vietnam war and proposed by the U.S. Mansfield Amendment. Thus, the Germans thought, they must at least demonstrate some efforts for the common defence in order to strengthen the hand of the atlanticists in the U.S. administration.<sup>39</sup> The fact still remains that "(a) common element of all the conventional force improvement initiatives launched in

---

allies must ensure strong conventional forces in Europe so that they will not be compelled to employ nuclear weapons") *ibid.*, p.23

<sup>36</sup> Apart from these concerns the German reluctance towards a strengthening of its conventional forces is due to the higher costs of conventional weapons compared to nuclear ones

<sup>37</sup> For a description of the history of forward defence see Peter Barth, "Zwischen Vorne- und Vorwärtsverteidigung" in: *Mediatus* (Vol.4, No.7/8, August 5, 1985), p.3-6

<sup>38</sup> Annual military expenditure has been increased from 25.8 to 50.2 billion DM in the seven years from 1970-1977, see "Seid umschlungen, Milliarden" in: *Der Stern*, (Vol.30, No.38, September 8, 1977) p.81

<sup>39</sup> see Roger L.L. Facer, *Conventional Forces and the NATO Strategy of Flexible Response. Issues and Approaches*, (Santa Monica: RAND Corporation, January 1985), p.33. A comprehensive discussion about all the reasons of the Federal Republic to strengthen the Bundeswehr can not be given here. Reasons based in the German armament industry as well as German power aspirations certainly played an important role. For this context see Carola Bielfeldt, Peter Schlotter, *Die militärische Sicherheitspolitik der Bundesrepublik Deutschland. Einführung und Kritik* (Frankfurt/New York: Campus Verlag, 1980)

NATO since 1970 is their American origin."<sup>40</sup> This fact suggests "that, during this period, strengthening conventional deterrence remained largely a concern of the United States instead of European countries."<sup>41</sup>

Among the German government and the opposition parties there exists general consensus that the highly industrialised and densely populated Federal Republic would be destroyed to unacceptable levels by a prolonged conventional war. Since fully 30% of West Germany's population and 25% of its industrial capacity lie within 100 kilometres of the border between the two Germanies, the White Paper, produced under Defence Minister Leber, concludes:

"Die Reaktion der NATO muß verhindern, daß es zu einem länger andauernden Kampf auf dem Territorium der Bundesrepublik Deutschland kommt. Denn ein solcher Kampf würde letztlich die Substanz dessen zerstören, was verteidigt werden soll."<sup>42</sup>

General Steinhoff, until 1974 chairman of NATO's Military Committee, denied that it was a "desirable objective" to be able to execute a prolonged conventional defence against a massive Soviet attack.<sup>43</sup> The no-first use debate and the German pleading for adherence to NATO's first use policy must be considered in this context. In their reply to a proposal made by the so-called U.S "Gang of four" to renounce NATO's principle of first use<sup>44</sup>, a German counter "Gang-of-four", consisting of prominent members such as former Minister of Defence Georg Leber, explained their rejection of these plans by the destructiveness of a conventional war:

---

<sup>40</sup> Facer, 1985, *op.cit.*, p.48

<sup>41</sup> *ibid*

<sup>42</sup> "NATO must react in such a way that a protracted war fought on the Federal Republic of Germany's territory be prevented, since such a battle would eventually destroy the substance of that which should be defended." Weißbuch 1975/76, *op.cit.*, p.87

<sup>43</sup> "Die Forderung, nach einem Großaufmarsch eine langwährende konventionelle Verteidigung gegen den Massenangriff der Sowjets und des Blocks durchführen zu können, ist kein erstrebenswertes Ziel." ("The request, after a main deployment to be able to conduct a long-lasting defense against the massive attack of the Soviets and the bloc, is not a desirable aim.") Johannes Steinhoff, Wohin treibt die NATO? Probleme der Verteidigung Westeuropas (Hamburg: Hoffmann und Campe, 1976), pp.62-63

<sup>44</sup> Bundy et.al. 1982, *op.cit.*,

"For the Germans and other Europeans whose memory of the catastrophe of conventional war is still alive and on whose densely populated territory both pacts would confront each other with the destructive power of modern armies, the thought of an ever more probable conventional war is terrifying."<sup>45</sup>

Thus, the political goal of achieving a balance between the conventional forces of NATO and the Warsaw Pact has always been regarded with mixed feelings on the part of the Federal Republic, because nuclear deterrence, expressed in the guarantee of employment of U.S. strategic weapons, would then be obviated. This situation would correspond with a "decoupling" of the Federal Republic's defence from the U.S. nuclear umbrella <sup>46</sup>.

However, as early as 1975, Afheldt analysed and demonstrated convincingly that on an operational level the Federal Government has envisaged participation in what it officially argues should be prevented: the build-up of an option for a protracted war in Europe.<sup>47</sup> According to the 1975/76 White Paper one task of German naval forces would be to protect U.S. reinforcement vessels.<sup>48</sup>

### 3.3.2. Strategic versus tactical

The rift between the U.S. and German doctrines is also reflected in two concepts of escalation. Europeans tend to perceive the "threat of escalation as increasing the risk of a nuclear war which would be disastrous for everyone",<sup>49</sup> while the United States "has justified the threat to escalate in terms of gaining some kind of military or bargaining advantage which, even though it might be temporary, would increase the chance of exercising some kind of control over the conflict

---

<sup>45</sup> Karl Kaiser/Georg Leber/Alois Mertes/Franz-Josef Schulze, "Nuclear Weapons and the Preservation of Peace", in: Foreign Affairs (Vol.60, No.5, Summer 1982), pp.1158-1170, p.1164

<sup>46</sup> Hans Rattinger, "Militärdoktrinen", in: Ralf Zoll/Ekkehart Lippert/Tjarck Rössler (ed.), Bundeswehr und Gesellschaft. Ein Wörterbuch (Opladen: Westdeutscher Verlag, 1977), pp.164-169, p.168

<sup>47</sup> Afheldt, 1976, op.cit., p.179

<sup>48</sup> White Paper 1975/76, op.cit., pp.103-105

<sup>49</sup> Buteux, 1983a, op.cit., p.75

and allow for the possibility of crisis management after armed conflict had occurred".<sup>50</sup>

The different concepts of "escalation" result in different perceptions of the role for TNF: While the Germans prefer to consider TNF as a means for a quick escalation to the strategic level, the U.S. prefers the operational or tactical use of TNF in combination with conventional weapons on an integrated battlefield:

"Europeans could emphasise TNF as a link to American central systems, while Americans could stress TNF as a complement to conventional defense if need be."<sup>51</sup>

This different perception of the role of TNF is responsible for NATO's lack of a consistent TNF posture what has been often lamented in the strategic debate.<sup>52</sup>

Henry Kissinger summarised the German attitude with a statement which has become famous:

"The real goal of our allies - underlining the dilemma of tactical nuclear weapons - has been to commit the United States to the early use of strategic nuclear weapons, which meant a US-Soviet nuclear war fought over their heads".<sup>53</sup>

### 3.3.3. Political versus military use

The Germans prefer a concept of a "political" or "demonstrative" use of nuclear weapons.<sup>54</sup> This concept corresponds to the notion of deterrence by retaliation

---

<sup>50</sup> *ibid.*, p.74

<sup>51</sup> Treverton, 1981, *op.cit.*, p.1

<sup>52</sup> e.g. Colin S. Gray. "Theater Nuclear Weapons. Doctrines and Postures." *World Politics*, (Vol.28, No.2, January 1976), pp.300-314.; Laurence Martin "Flexibility in Tactical Nuclear Response" in Holst/Nerlich (eds.) 1977, *op.cit.*, p.255-265. A review article on this problem is provided by Harold A. Feiveson, "The Dilemma of Theater Nuclear Weapons" in *World Politics*, (Vol.33, No.1, Oct. 1980), pp.282-298

<sup>53</sup> Henry Kissinger, *The White House Years* (London: Weidenfeld and Nicolson and Michael Josef, 1979), p.219, emphasis in the text

<sup>54</sup> See as an example Steinhoff, 1976, *op.cit.*, p.190. For a discussion of the advantages and disadvantages of "demonstrative use" see Paul Buteux, "Theatre Nuclear



or punishment. The nuclear weapons' role within this concept is to communicate with the opponent by means of the threat of using nuclear weapons. Accordingly it is based on the idea that the Soviet Union, and not the other Warsaw Pact nations should be threatened with a strike as the main recipient of the communicated threat. The aim was to demonstrate NATO's willingness to immediately escalate the conflict to the strategic level:

"The demonstration use of TNWs would be designed to exhibit alliance determination to resist an attack and to warn the enemy that his actions inexorably increase the likelihood of a more general nuclear response."<sup>55</sup>

Accordingly there was also consensus among all German parties to object to the use of TNF as a means to deny the enemy military success. Instead, they supported the notion of confronting the aggressor with an unacceptable risk of nuclear escalation.<sup>56</sup> The aim of hitting the Soviet Union quite early in a conflict is also aimed at coupling the U.S. with European theatre warfare after the outbreak of hostilities. Thus this concept is the most direct equivalent to the idea of "coupling".

In order to avoid misunderstandings it again should be born in mind that nuclear weapons for "political" use are still real weapons of mass destruction:

"(A)uch 'politische Waffen' sind Waffen und damit Instrumente der physischen Gewaltanwendung, die überdies... um ihrer drohstrategischen Funktion willen militärisch einsatzbereit sein - und den politischen Willen zum militärischen Einsatz einschließen - müssen."<sup>57</sup>

---

Weapons and European Security". Canadian Journal of Political Science, Vol X:4 (December 1977) pp.781-808.

<sup>55</sup> Buteux, 1977, op.cit., p.790

<sup>56</sup> Buteux, 1983, op.cit., p.96

<sup>57</sup> "Also 'political weapons' are weapons and thus instruments of physical use of force, which moreover ... in context of their function of a strategic threat have to be operational and which have to include the political determination for their military employment." Susanne Lang, Abschreckungstheorie - Analyse und Kritik ausgewählter theoretisch-begrifflicher Grundkonzepte, Hamburg: Diplomarbeit, Dezember 1988, p.88

### 3.3.4. Two incompatible first use concepts

All these contradictory and mutually exclusive views culminate in both countries' dispute on their two, principally incompatible first use concepts. The Germans request a first use of nuclear weapons as early as possible and on a demonstrative, political and strategic level, signaling to the enemy the necessity of terminating the war. For the United States, however, flexible response would argue for precisely the opposite: first use of nuclear weapons as late as possible and on an operational level to achieve a military advantage. The implementation of the U.S. first use concept, therefore, foresees "short-range battlefield systems in an effort to keep the nuclear exchange limited"<sup>58</sup>, whereas the German concept foresees longer- range weapons that are able to hit targets in the Soviet Union.

Wolfgang Heisenberg precisely summarised the two antagonistic first use concepts:

"While the United States seems to use nuclear weapons for land combat in Central Europe as late as possible and on a more massive scale, in order to achieve at least a temporary military advantage, West Germany is obviously interested in employing them earlier and in a less massive way, mainly to influence the will of the opponent but not to destroy enemy targets."<sup>59</sup>

Since a political use neither implies that the weapons will not be used at all nor that the use would not follow any military criteria, this definition creates difficulties. If targeting explicitly includes military objects, i.e. if employment is

---

<sup>58</sup> Daniel Charles, Nuclear Planning in NATO. Pitfalls of First Use (Cambridge, MA: Ballinger 1987) p.125

<sup>59</sup> Wolfgang Heisenberg, "The Alliance and Europe: Part I: Crisis Stability in Europe and Theatre Nuclear Weapons", Adelphi Papers, No. 96 (London: International Institute for Strategic Studies, 1973) p.3. See also Uwe Nerlich: "Vereinfacht bevorzugten die USA einen massiven Einsatz (von Nuklearwaffen, S.P.) zu einem möglichst späten Zeitpunkt bei möglicher Begrenzung auf das Gefechtsfeld, die BRD einen sparsamen Einsatz zu einem möglichst frühen Zeitpunkt bei möglicher Ausweitung des Einsatzraumes." ("Simply said the United States preferred a massive employment (of nuclear weapons, S.P.) as late as possible with the most possible limitation of the battlefield, while the Federal Republic preferred a restrained employment as early as possible with an expansion over the operational area as far as possible.) Uwe Nerlich, Die Verbesserung der nuklearen Fähigkeiten der NATO: Verteidigungs- und verhandlungspolitische Probleme, (Ebenhausen: Stiftung Wissenschaft und Politik, January 1978) SWP-AP 2159, p.34

militarily rewarding, it is more than ambiguous to call such an employment "political".<sup>60</sup>

The German first use concept suggests that the modernisation of the LRTNF harmonises more with West German strategic doctrines than with U.S. ones. There are indications that the German strategic experts and politicians considered deploying the Pershing II missile as the optimal weapon system for implementing the German first use concept and land-deployed long-range TNF as a means to secure a quick escalation of the war to the strategic level.

### 3.4. Ambiguity of flexible response: the TNF posture

The ambiguity of the flexible response strategy is demonstrated expressively in NATO's lack of a coherent TNF posture. This incoherence is manifested in the varied history of the TNF. Deployed without coherent rationale, subject to U.S. reduction plans but German insistence on its full maintenance, the TNF's evolution demonstrates that the military implementation of a strategy cannot be more consistent than the strategy itself.

#### 3.4.1. Description of the TNF

Estimates of U.S. tactical nuclear weapons have ranged from 50.000 in 1966 to 22.000 in 1975.<sup>61</sup> In the strategic debate, however, the term tactical nuclear weapons (and this corresponds to the way in which this term is here applied) has always referred to the 7.000 TNFs which were deployed in Europe until the end of the seventies.

The Joint Congressional Atomic Energy Committee's (JCAE) decided to expand production of fissionable materials in large quantities in the late fifties. The reason for expanding production of nuclear weapons was attributed "to the

---

<sup>60</sup> Uwe Nerlich criticises the categorisation of nuclear weapons as political ones, in particular in view of the fact that the weapons, which could potentially be used with a political intention are those which run automatically after their release. Nerlich, 1978, op.cit., p.40

<sup>61</sup> 22,000 Tactical and 8,000 Strategic: 30,000 U.S. Nuclear Weapons, Defense Monitor, (Vol.4, No.2, Center for Defense Information, Washington D.C. February 1975),pp. 12, quoted in Leitenberg, 1978 op.cit., p.7

most parochial motivations possible"<sup>62</sup>: the members of the JCAE regarded consumption of relatively large amounts of fissionable materials as a way of expanding Atomic Energy Commission activities in their home districts. The Joint Chiefs of Staff wanted to use all materials available, obviously "irrespective of any previous plan or warfare doctrine."<sup>63</sup> While they had been brought to Europe in 1954 without any clear employment doctrine, the authorised number of TNF in Europe increased from 2,500 in 1960 to about 7,200 in 1968 during Secretary McNamara's term of office<sup>64</sup>, in spite of his clandestine no-first use policy and his de-emphasis of reliance on nuclear weapons.<sup>65</sup> David N.Schwartz commented on this contradictory policy: "There was, of course, a certain irony in this position."<sup>66</sup>

The following data refer to the level of 6000 TNF after 1979, since as part of the 1979 NATO Dual-Track decision also 1000 TNF had been withdrawn. These theatre nuclear forces are deployed in seven European countries and cover the full spectrum of ranges and variations, e.g. long-range missiles and bombers for European contingencies, tactical aircraft and bombs, short-range missiles, artillery, surface-to-air missiles and land mines.<sup>67</sup> According to Senator Sam Nunn 60-70% of NATO's 1980 stockpile of 6,000 TNFs are assigned to battlefield systems:

""Two-thirds of NATO's ... tactical nuclear warheads are tied to delivery systems with ranges less than 100 miles, and most of these have ranges of 10-

---

<sup>62</sup> Leitenberg, 1978, *op.cit.*, p.12

<sup>63</sup> *ibid.*,

<sup>64</sup> *ibid.*, p.16

<sup>65</sup> The interpretation of McNamara as being a clear proponent of no-first use during his office as U.S. Defense Secretary is at least debatable. See for example statements such as the following: "This does not mean that the NATO forces can or should do without tactical nuclear weapons. On the contrary, we must continue to strengthen and modernize our tactical capabilities to deal with an attack where the opponent employs such weapons first, or any attack by conventional forces which puts Europe in danger of being overrun." Robert McNamara, in Hearings, U.S. House of Representatives, Committee on Appropriations, Subcommittee, Department of Defense Appropriations for 1964, 88th Congress, Part I, Washington D.C., 1963, pp.100-102, quoted in *ibid.*, p.32

<sup>66</sup> Schwartz, 1983a, *op.cit.*, p.14

<sup>67</sup> See the table of U.S. nuclear weapons in Europe in William M. Arkin and Richard W. Fieldhouse, Nuclear Battlefields. Global Links in the Arms Race (Cambridge, Massachusetts: Ballinger, 1985), p.102

20 miles. The limited reach of the Alliance's 155mm and 8-inch nuclear artillery and its tactical surface-to-surface missiles - including the ... Lance missile - would in all likelihood confine their use to targets on NATO territory. Knowledge that the bulk of NATO tactical nuclear weapons, if employed, would be confined to strikes on NATO territory is hardly likely to terrify or deter the Soviet Union."<sup>68</sup>

The majority of these weapons are concentrated in Central Europe, particularly in West Germany. While all of these forces are under U.S. control, about two thirds of the 6,000 would be delivered by allied forces.<sup>69</sup> The yields of the TNF range from subkilotons up to a one megaton for air dropped bombs.<sup>70</sup>

If used, most TNFs with their short range, would detonate on German territory. Philipp Sonntag calculated that the employment of 10% of NATO's TNFs would destroy the Federal Republic as a viable society.<sup>71</sup> In general, estimates of how many people would be killed in a tactical nuclear war are as follows: some thousands, on the assumption of an immediate stop to a war which involved only a minimal number of nuclear weapons; if some restraints were to be exercised in the use of TNF anywhere from two to twenty million would be killed; in the absence of restraints, 100 million lives would be lost.<sup>72</sup>

Shortly after the TNFs' introduction into NATO's stockpile, SHAPE conducted its first exercises in 1954 and 1955. The exercise "Carte Blanche", held on June 20-28, 1955, gained some sad glory in this context and "came as a severe shock to German opinion."<sup>73</sup> Carte Blanche simulated mass dropping of atomic bombs over West Germany, areas of Belgium, the Netherlands and Eastern France for the first time. It was concluded that the dropping of 355 nuclear weapons

---

<sup>68</sup> Senator Sam Nunn in the Third German-American Roundtable on NATO: The MBFR Negotiations. A Conference Report (Cambridge, Massachusetts: Institute for Foreign Policy Analysis, 1980) p.19, quoted in Record, 1981, op.cit., p.28.

<sup>69</sup> ibid. p.32

<sup>70</sup> Leitenberg, 1978, op.cit., p.113

<sup>71</sup> Philipp Sonntag, Verhinderung und Linderung atomarer Katastrophen (Bonn: Osang Verlag, 1981) p.48-49

<sup>72</sup> Leitenberg, 1978, op.cit., p.33

<sup>73</sup> Kissinger, 1984, op.cit., p.291

within 48 hours would result in 1,7 million deaths and 3,5 million casualties in West Germany.<sup>74</sup>

### 3.4.2. Attempts of the TNFs' Reduction

In the spring of 1974, a campaign was started in American newspapers, aiming at a substantial reduction of the 7,000 TNF stockpile. A series of articles were published which were - according to Leitenberg - clearly written with access to persons in the government, indicating that Secretary of Defense Schlesinger was considering their reduction. Schlesinger was supposed to have argued that their "original military considerations that led to the build-up of nuclear weapons in Europe have been overtaken by events or were based on mistaken assumptions."<sup>75</sup>

At the same time, a study was published by the Brookings Institution in December 1974, which suggested that U.S. TNFs in Europe could be reduced from 7,000 down to 2,000 and that the warhead yields could be reduced to between a maximum of 10 kilotons and a minimum of 0.5 kilotons. Former Assistant Secretary of Defense Enthoven, who served under McNamara, proposed that the force could be reduced to 1,000 weapons.<sup>76</sup>

However, no reductions in TNF were accomplished. Exactly the opposite happened: On November 4, 1974 Defense Secretary Schlesinger, during a visit to the Federal Republic announced that no changes in nuclear equipment were

---

<sup>74</sup> Leitenberg considers these figures as likely to have been ridiculously low in view of the number of weapons used and the probable high yields at that time, see Leitenberg, 1978, op.cit., p.34. For a detailed description see Kissinger 1984, op.cit., pp. 291

<sup>75</sup> D. Morgan, "Nuclear force in Europe held open to cutting" in Washington Post, (April 5, 1974), quoted in Leitenberg, 1978, op.cit., p.38. For the series of articles see also ibid. For confirmation that Schlesinger planned a reduction of stockpile, see Anthony H. Cordesman. "Deterrence in the 1980s: Part I. American Strategic Forces and Extended Deterrence", Adelphi-Papers No.175. (London: The International Institute for Strategic Studies, Summer 1982), p.19

<sup>76</sup> Alain C. Enthoven, "U.S. Forces in Europe: How Many? Doing What?" in Foreign Affairs, (Vol.53, No.3, April 1975), p.513-532. Jeffrey Record, U.S. Nuclear Weapons in Europe. Issues and Alternatives. (Washington D.C.: Brookings Institution, 1974)

planned, save for the programme changes which included bringing a larger number of Lance missiles into Germany.<sup>77</sup>

Another attempt to reduce TNF was to offer part of them at the MBFR table under "Option III". In December 1975 NATO tabled in Vienna the so-called Option III, which included 1,000 nuclear warheads, 54 nuclear capable F-4 aircraft and 36 Pershing missiles if the Soviets withdrew an entire tank army and its complement of tanks - 1,700 armored vehicles and 68,000 men from the GDR.<sup>78</sup> This proposal, made by the Dutch delegation in a NATO Defence Minister meeting, was obviously not welcomed by the other NATO members<sup>79</sup>, especially not by the West German Ministry of Defence. General Ulrich de Maziere is quoted as having said that "it will not be feasible to make a considerable change in the number of nuclear weapons stored in Europe."<sup>80</sup> Milton Leitenberg explains why the Germans were reluctant to agree to a withdrawal of the TNF:

"Any reduction, no matter what its nature, and regardless of the substantive questions involved, were seen as upsetting to 'the perceptions' of NATO allies on the degree of US 'committedness' and US military support."<sup>81</sup>

After the withdrawal of the 1,000 TNF as an integral part of the 1979 decision,<sup>82</sup> the NPG meeting in Montebello in October 1983 again decided to bring another 1,400 warheads back to the United States.<sup>83</sup> German adherence to the full size of the stockpile with warheads of a range of yields up to that of a Poseidon missile

<sup>77</sup> Leitenberg, 1978, op.cit., p.39

<sup>78</sup> Reinhard Mutz (ed), Die Wiener Verhandlungen über Truppenreduzierungen in Mitteleuropa (MBFR). Chronik, Glossar, Dokumentation, Bibliographie, 1973-1982 (Baden-Baden: Nomos, 1983), p.69

<sup>79</sup> "Schlesinger calls A-Arms Vital to Guard Europe" in New York Times (December 12, 1974)

<sup>80</sup> "European Worried by Pressure on U.S. to cut Nuclear Weapons", in New York Times, (September 5, 1975). For confirmation of the German resistance against a reduction of TNF see: Gert Krell and Peter Schlotter, Zur Diskussion über die taktischen Nuklearwaffen in Europa. Analyse und Dokumentation (Frankfurt: Hessische Stiftung Friedens- und Konfliktforschung), HSK-Report 2/1977, pp.1,11.

<sup>81</sup> Leitenberg, 1978, op.cit., p.39, emphasis in the text and by S.P.

<sup>82</sup> The United States was reluctant to publicise the withdrawal of the 1,000 warheads for domestic political reasons in the wake of Afghanistan, see Legge, 1983 op.cit., p.37

<sup>83</sup> For the Communiqué see Cartwright/Critchley, 1985, op.cit., p.154-155

has obviously changed. The remaining 4,600 weapons are a valued bargaining counter at arms control negotiations since even concerning the residual TNFs the question arose "how much redundancy in rounds and systems is needed."<sup>84</sup> However, the German approval of the TNFs' withdrawal in the early eighties has to be considered in the context of the LRTNF deployment. As long as these weapons are deployed in Europe, they increase the chance of an early passing of the nuclear threshold. If, however, these weapons are withdrawn again, it is of highest priority to stop the process of denuclearisation of Europe. As a means for averting Europe's denuclearisation even battlefield nuclear weapons are welcome. This is expressed by the vehement German opposition to the "second zero" and later by the German refusal of a "third zero-option" which Gorbachev proposed for all nuclear systems in ranges below 500 kms.

Thus for the maintenance of a considerably high TNF stockpile as an expression of the U.S. commitment to Europe's defence German delegations in NATO opted against any reduction of these TNFs, not even in exchange for an entire Soviet tank army. But the Germans were lucky: while the United States prevailed with its TNF policy and presented Option III in Vienna, the Soviets simply rejected the proposal.

Albeit the everlasting dispute in the alliance on the question of when, how and with what to cross the nuclear threshold and albeit the compromises between different national preferences on first and follow-on use which the Nuclear Planning Group had set up, "actual operational planning for nuclear employment requires clear direction."<sup>85</sup> However, it will now be demonstrated that also on the level of NATO's operational TNF target planning the contradictions of flexible response are not solved.

Moreover, we will deal with German apprehensions that in the test case of war the U.S. first use concept has much higher chances to prevail. Therefore it is necessary to analyse to what extent the Germans can expect to influence first use in case of war according to their guidelines. Against the background of a

---

<sup>84</sup> Lothar Rühl, "The Nuclear Balance in the Central Region and Strategic Stability in Europe", in NATO's Sixteen Nations, (August 1987a), pp.18-32, p.22. Volker Rühle, Defence spokesman of the CDU/CSU group, for instance, presented such a proposal in The Independent (December 10, 1987)

<sup>85</sup> Ivo H. Daalder, "NATO Nuclear Targeting after INF" in The Journal of Strategic Studies, (Vol.11, No.3, September 1988), pp.265-291



detailed description of SACEUR's nuclear employment planning the existence of an independent national command system will be elaborated. Thus U.S. planners have a much higher chance to prevail with the U.S. first use concept. Contributions of German strategic experts will demonstrate that these details were considered by them. Thus precise knowledge of the TNFs' operational employment planning might have influenced their strategic doctrine in that they requested land-deployed LRTNF which, due to their vulnerability, can be expected to induce an early employment.

### 3.5. German apprehensions concerning first use

Deputy Secretary of State Dr. von Bülow presented an optimistic evaluation of the Federal Republic's state of information in case nuclear weapons were to be launched from German territory. After having pointed out the Federal Republic's membership in all relevant NATO organs and the German possession of nuclear delivery systems, von Bülow concludes:

"Aus diesen Feststellungen ergibt sich, daß die Bundesregierung in allen wesentlichen Fragen des möglichen Einsatzes von Nuklearwaffen - politische Richtlinien, strategische Prinzipien, operative Konzeptionen, Ziel- und Einsatzplanung, Einsatzbeschränkungen, technische Fragen, politische Konsultation, Anforderungs- und Freigabeverfahren, Führungs-, Kontroll- und Verbindungsmittel - über diejenigen Erkenntnisse und Mittel verfügt, die zum Gesamtverständnis und zur Wahrung unserer nationalen Interessen erforderlich sind."<sup>86</sup>

Only few experts seem to share von Bülow's optimism that it is possible that the NATO consultation process could function effectively in times of crisis.<sup>87</sup> Stratmann also points out that the result of these consultation procedures in

---

<sup>86</sup> Emphasis by S.P., "Based on these statements it appears that in all essential questions regarding the potential employment of nuclear weapons - political guidelines, strategic principles, operative conceptions, target- and employment planning, limitation of employment, technical questions, political consultation, request and release procedures, command, control and communication the Federal Republic is provided with all the information and means which are necessary for both a comprehensive understanding and the safeguarding of our national interest." Reply of Dr. Andreas von Bülow, Parliamentary State Secretary in the Ministry of Defence, to a parliamentary question of MP Dr. Friedrich Voss, CDU/CSU; Dr. Andreas von Bülow, Stichworte zur Sicherheitspolitik, Presse- und Informationsamt der Bundesregierung No.11 (Bonn, November 1977a) p.10

<sup>87</sup> Cartwright/Critchley, 1985, op.cit., p.43

NATO Council/DPC are "not obligating" for the British Premier and the U.S. President.<sup>88</sup>

### 3.5.1. Nuclear weapons' employment planning

For the assignment of targets and nuclear weapons there exist two complementary systems: a U.S. and a NATO system. The U.S. strategic Triad, consisting of the ICBMs, SLBMs and strategic bombers as well as part of the TNF is committed to the SIOP (Single Integrated Operational Plan). The SIOP is supposed to coordinate weapons for a general nuclear war as well as those forces which are assigned to NATO in case of war, such as the Poseidon. SIOP consists of Limited Nuclear Options (LNO) which are preplanned in order to support regional operations. SIOP' weapons are assigned to targets of the National Strategic Target List (NSTL), which is drawn up by the Joint Strategic Targeting Planning Staff (JSTPS) in Omaha, Nebraska, USA.<sup>89</sup> European officers from the SHAPE staff, too, participate in the nuclear weapons planning in Omaha.<sup>90</sup>

To fulfill NATO and SACEUR's military requirements, the Nuclear Operations Plan (NOP)<sup>91</sup> has been established at SHAPE in Brussels by the Nuclear Activities Branch. The NATO equivalent of the JSTPS, the Nuclear Activities Branch of SHAPE, is thus responsible for target planning concerning the nuclear forces assigned to NATO. It is largely staffed by American personnel<sup>92</sup> and operates "under both U.S. guidance and NATO guidance"<sup>93</sup>, meaning participation of officers of NATO member countries.

---

<sup>88</sup> Stratmann, 1981, op.cit., p.86

<sup>89</sup> Nerlich, 1978, op.cit., pp.10

<sup>90</sup> Thomas C. Wiegele. "Nuclear Consultation Process in NATO." Orbis, (Vol.16, Summer, 1972), pp.462-487., p.484

<sup>91</sup> The NOP is also used in its synonymous older expression "General Strike Plan" (GSP)

<sup>92</sup> Buteux, 1983, op.cit., p.205

<sup>93</sup> See U.S. Congress, Senate. U.S. Security Issues in Europe: Burden sharing and Offset, MBFR and Nuclear Weapons. A Staff Report prepared for the use of the Subcommittee on U.S. Security agreements and commitments abroad of the Committee on Foreign Relations. Washington D.C.: U.S.G.P.O., December 2, 1973, pp.19-22; in the following : U.S. Senate Report, Security Issues, 1973

The nuclear forces covered by SHAPE planning are comprised of the warheads actually deployed in the European theatre. Analogous to the U.S. strategic NSTL-List SHAPE developed a target list for the Allied Command Europe (ACE). However, while in SIOP all forces are assigned to the targets of the NSTL, in SHAPE's Nuclear Operations Plan only certain weapons are assigned to the targets of the ACE. For these preplanned attacks SACEUR envisages nuclear capable aircraft, Pershing and Poseidon. Part of these preplanned forces are in a status of Quick Reaction Alert (QRA). Certain targets of the ACE list are covered by SIOP.

The NOP specifies a "Scheduled Program" of targets which would also be attacked as part of a general nuclear release. A "Priority Strike Program" (PSP), which is of highest priority to SACEUR, and against which the Quick Reaction Alert Systems (QRA) are targeted, includes targets on Allied Command Europe's so-called "Critical Installation List". In addition to the PSP, there exists a "Tactical Strike Program" (TSP) Both programmes, the PSP and TSP, have been coordinated with the SIOP; thus in general nuclear release SIOP and NOP will be executed together. However, precisely how has never been clarified. The most precise statement was made in the 1973 Senate Hearing:

"All PSP and TSP strikes have been coordinated, or 'deconflicted', with the U.S. SIOP target list maintained by the Joint Strategic Targeting Center at Omaha."<sup>94</sup>

These details of nuclear employment planning already convey the limitations for German politicians to influence it. First, due to its link to SIOP, the NOP must respond to changes in U.S. policy and strategic doctrine. Secondly, a large part of NATO planning is in the hands of American officers "who, whatever their relationship to the U.S. Command structure, naturally were sensitive to changes in the direction of American military policy respecting nuclear weapons."<sup>95</sup>

Traditionally the actual employment of TNF has been devised into two types: selective use and general nuclear response.<sup>96</sup> The objectives of the general nuclear response are

---

<sup>94</sup> U.S. Security Issues, 1973, , op.cit., p.22

<sup>95</sup> Buteux, 1983, op.cit., p.127

<sup>96</sup> U.S. Senate Report, Security Issues, 1973, op.cit., p.21

"to conduct, in concert with external forces, operations to neutralize enemy nuclear capability, destroy his ability and will to wage war, disrupt his capability to exercise command and control, and destroy his land, naval and air forces, including logistic support elements."<sup>97</sup>

Accordingly, general nuclear response with TNF would occur at a much later stage than those selective options and would be coordinated with SIOP. The weapons contemplated for the NOP's mission for general nuclear response involves the launching of large numbers of longer-range delivery systems such as SLBM, Pershing and tactical aircraft.<sup>98</sup>

### 3.5.2. The selective use of TNF

"Selective use" of TNF involves many partially preplanned options, which are undertaken "on a controlled or limited scale either for demonstrative or tactical purposes" with the objective "to confront the aggressor with the risk of escalation with the aim of making him halt the attack or withdraw."<sup>99</sup> Thus these Selective Employment Plans (SEP) correspond to the first use within flexible response's principle of deliberate escalation.

As already indicated by the linguistic proximity, the Selective Employment Plans, incorporated in NOP, are based on the same principles as SIOP's Limited Nuclear Options. The difference is the level, to which the terms are applied: while Selective Employment Plans, which comprise NOP, refer to the theatre level and were agreed to by NATO Limited Nuclear Options are developed by the U.S. SIOP and are designed for strategic weapons.<sup>100</sup>

---

<sup>97</sup> Senate Armed Services Committee, Department of Defense Authorization for Appropriations for Fiscal Year 1980 (Washington DC: U.S.G.P.O., 1979), quoted in Desmond Ball, Targeting for Strategic Deterrence, Adelphi Paper 185. London: The International Institute for Strategic Studies, 1983, p.16

<sup>98</sup> U.S. Congress, Congressional Budget Office. Planning U.S. General Purpose Forces: The Theater Nuclear Forces, Washington D.C.: U.S.G.P.O., January 1977, p.19

<sup>99</sup> U.S. Senate Report, Security Issues, 1973, op.cit., p.21

<sup>100</sup> Nerlich, 1978, op.cit., p.16

These selective options can be distinguished according to their main objective and the target area.: (1) demonstrative, (2) limited defensive use (3) restricted battle area use, (4) extended battle area use, (5) theatrewide use.<sup>101</sup>

The key concept concept of TNF selective use involves the preplanning of "packages" of nuclear weapons.<sup>102</sup> The packages provide operational plans for the employment of battlefield TNF which are ruled by the U.S. Army.

Developed at the level of the army corps, a preplanned "Selective Employment Package"

"is a group of nuclear weapons of specific yields for use in a specific area and within a limited time to support a specific tactical goal. Each package must contain nuclear weapons sufficient to alter the tactical situation decisively and to accomplish the mission."<sup>103</sup>

The number of weapons in a corps package consists of between

"100 to 200, depending on the threat, the mission, the terrain, and population characteristics. A brigade might find as many as 20 to 30 weapons employed in its area or as few as 0 to 5, depending on the threat in its area relative to the rest of the corps area. The time parameter consists of a fixed 12 to 24 hour 'timeframe' and a movable 45 to 90 minute 'timespan' is foreseen. The area for a corps package extends from just behind an assumed line of contact to the range of delivery systems or intelligence gathering systems available to the corps and all across the corps front. Constraints may preclude employment across political boundaries."<sup>104</sup>

The objective in employing a package of nuclear weapons is "to quickly and decisively influence the immediate military situation by destroying enemy military forces."<sup>105</sup> These packages can range from relatively few tactical nuclear bombs to shorter-range and longer-range TNF.<sup>106</sup>

---

<sup>101</sup> These are the five employment options, identified in the US Army policy paper, "The Deployment and Employment of Tactical Nuclear Weapons" approved on May 7, 1973, cited in John P. de Rose, The Evolution of U.S. Army Nuclear Doctrine, 1945-1980 (Boulder, Colorado: Westview Press, 1980) p.170

<sup>102</sup> Daalder, 1988, op.cit., p.274

<sup>103</sup> "Operations Field Manual 100-5", op.cit., 1982, pp.7-12

<sup>104</sup> U.S. Army, "Reference Book Conventional-Nuclear Operations", Vol.1 (Fort Leavenworth, U.S. Army Command and General Staff College Reference Book 100-30, Vol.1. Conventional-Nuclear Operation, August 6, 1976), p.25

<sup>105</sup> Planning U.S. General Purpose Forces, 1977, op.cit., p.19

<sup>106</sup> ibid.

Ivo H. Daalder concludes from this description of the operational targeting planning:

"(O)perational plans exist both for early and for late use, for limited and for massive use, and for extended geographical as well as for battlefield use."<sup>107</sup>

Since battlefield TNFs imply operational imperatives due to the danger of being captured during WP's invasion, a battlefield commander might be induced to request at a very early stage release of nuclear weapons. Therefore, it has often been assumed that first use will be the response of a request of a battlefield commander.<sup>108</sup>

Uwe Nerlich criticises that preplanned use of TNF in order to maintain the threat of escalation and employment of battlefield TNF are not coordinated within NOP:

"Aber die militärischen Zweckmäßigkeiten von programmierten Kernwaffeneinsätzen, die auf wirksame Erhaltung der Eskalationsdrohung angelegt sind, und von wirksamer nuklearer Gefechtsfeldunterstützung, die rechtzeitig vor einem Zusammenbruch der konventionellen Verteidigung noch eine drastische Wende herbeiführen soll, sind bisher weder innerhalb des amerikanischen noch innerhalb des SACEUR-Systems hinreichend aufeinander abgestimmt."<sup>109</sup>

### 3.5.3. The Supersession of NATO's command system

Various analysts exclude an early and timely first use of nuclear weapons. They argue with NATO's time-consuming procedures for the request and the release of nuclear weapons and the process of consultation among NATO governments.<sup>110</sup> In particular advocates of the battlefield use of TNF are concerned that the political approval of nuclear firing requests will be

---

<sup>107</sup> Daalder, 1988, op.cit., p.272

<sup>108</sup> Charles, 1987, op.cit., p.141

<sup>109</sup> "But the military effectiveness first, of a programmed employment of nuclear weapons, which aims at an effective maintenance of the threat of escalation, and second of effective nuclear battlefield weapons which immediately before a collapse of a conventional defence are supposed to change the situation dramatically, are not coordinated - neither within the U.S. system nor within the SACEUR system". Nerlich, 1978, op.cit., p.18

<sup>110</sup> Stratmann, 1981, op.cit., pp.82

communicated so late to the commanders that the delivery of nuclear fire in the battlefield will no longer be effective.<sup>111</sup>

Nuclear release procedures are "among the most tightly held secrets in the U.S. military."<sup>112</sup> Still it is possible to give a general description based on available information.

The first decision of the nuclear powers to consult their non-nuclear allies on the release of nuclear weapons was made in Athens in 1962 and resulted in the so-called famed Athens guidelines. According to these guidelines, the nuclear powers would consult their allies "time and circumstances permitting."<sup>113</sup> In April 1968 at the Hague NPG meeting, the Athens guidelines were expanded as a response to the German proposal. The guidelines confirmed that "special weight would be given to the views of the NATO country most directly affected - that is, the country on, or from, whose territory nuclear weapons would be employed; the country or countries providing the nuclear warheads; and the country or countries providing or manning the contemplated means of delivery."<sup>114</sup> These guidelines, which were approved for submission to the Defence Planning Committee in London in November 1969, are still valid today.

Two different levels of request are possible: one is the "top-down" release, which means that the initiative comes from the political authorities, thus from a NATO member government; the other level refers to the "bottom-up" release, working up from at least the corps level.<sup>115</sup> In this case, the Corps Commander's request would be conveyed from the Central Army Group (CENTAG) to the Allied Forces Central Europe (AFCENT) and finally to the Supreme

---

<sup>111</sup> William R. Van Cleave and S.T. Cohen, Tactical Nuclear Weapons. An examination of the Issues. (New York: Crane, Russak, 1978) p.58. Jeffrey Record, 1981, op.cit., p.34. Laurence Martin, "Theatre Nuclear Weapons and Europe" in Survival, (Vol.16, No.6, Nov.-Dez.1974) p.268-276, here p.273. Johann Adolf Graf Kielmannsegg, "Probleme eines kriegesischen Konflikts, insbesondere in Mitteleuropa" in Karl Kaiser / Karl Markus Kreis (eds.), Sicherheitspolitik vor neuen Aufgaben. (Frankfurt: Metzner Verlag 1977), p.295-349.

<sup>112</sup> Charles, 1987, op.cit., p.134

<sup>113</sup> Legge, 1983, op.cit., p.22

<sup>114</sup> U.S. Senate Report, Security Issues, 1973, op.cit., p.20

<sup>115</sup> Corps is the highest level of the U.S. Army, then follows Division and Brigade

Headquarters Europe (SHAPE). Thus, the request would have to pass three levels of military command before SACEUR or SHAPE could communicate this request to the NATO governments and to the Defence Planning Committee, which is composed of all NATO members except France. Now, at least in theory, the consultation process could begin:

"The normal forum for consultation would be the Defense Planning Committee where member governments would be able to express their views, in particular on the political and military objectives of the proposed use of nuclear weapons, the methods of use and the possible consequences either of use or non-use. These views would then be communicated to the nuclear power concerned, and the decision of the nuclear power would be conveyed to the allied governments, the North Atlantic Council and the major NATO commanders."<sup>116</sup>

Whereas the time which is estimated for the accomplishment of the consultation procedures is deleted in the Senate Hearing, the U.S. Army calculated the time consumed for a "bottom-up" release, thus in case of the request of a corps commander to release nuclear artillery for U.S. forces deployed in Germany to be 24 hrs. Ten hours are estimated to communicate the release to the U.S. President, and ten to go down the whole chain of military command levels. Another four hours are estimated for the arrival of the release at the delivery system, which is contemplated to execute the nuclear strike.<sup>117</sup> This data, however, had been released more than a decade ago and, according to Charles, improvements have been made to speed up these procedures considerably.<sup>118</sup>

The National Command Authority, who decides on the release of the nuclear weapons, is the U.S. President. Since he, at the same time, is the Commander in Chief, he is allowed to delegate this decision, once the release of nuclear weapons has been authorised. Thus, permission of release might as well be given from the U.S. President to subordinate administrators, civil servants or officers,<sup>119</sup> or, more probable, to SACEUR, SACLANT or subordinate NATO commanders. Paul Buteux, a U.S. researcher, stresses that "in principle, at all

---

<sup>116</sup> U.S. Security Issues, 1973, *op.cit.*, p.20

<sup>117</sup> Department of the Army, Field Manual 100-5: Operations (Washington, D.C.: Department of the Army, 1977) p.10-9, quoted in Record, 1981, *op.cit.*, p.35

<sup>118</sup> Charles, 1987, *op.cit.*, p.134

<sup>119</sup> Dieter O.A. Wolf, "Die Entscheidung über den Einsatz von Nuklearwaffen", Aus Politik und Zeitgeschichte, (Vol.27, B 18, May 5, 1979) pp.29-45, p.34



times the President can determine the scope of any delegation of authority, or revoke any delegation previously made."<sup>120</sup>

Theoretically, the U.S. President can only release, but not order the use of nuclear weapons to SACEUR. However, since SACEUR is at the same time Commander in Chief of the U.S. Forces in Europe (CINCEUR), he could very well be ordered by the U.S. President to employ nuclear weapons under his command in this capacity. This crucial detail is appended to the report in brackets:

"In a technical sense, the President cannot order SACEUR (who is simultaneously the Allied Commander responsible to NATO's Defense Planning Committee as well as the Commandeur, U.S. Forces in Europe) to fire a nuclear weapon; he can only release the weapon to him (although he can unilaterally direct the same commander, in his national capacity as commander of U.S. Forces in Europe, to employ nuclear weapons)."<sup>121</sup>

When he would receive the order to release the nuclear weapons – "although the release is not a command so that SACEUR would still retain discretion as to whether or not to fire the weapon"<sup>122</sup> – SACEUR would regard the President's decision as a "valid reflection of NATO's collective interest"<sup>123</sup>. SACEUR's interpretation of the decision as a collective one would be warranted since the President would have consulted the allies before he releases the nuclear weapon, only of course, as already mentioned, "if time and circumstances permit."<sup>124</sup>

Precisely by virtue of the existence of this second chain of communication for nuclear release through the national U.S. military command system, NATO's command system is superseded. Stratmann describes this situation in very friendly words:

"Dem Präsidenten steht also das eingespielte nationale militärische Führungssystem der USA zur Verfügung, das im nuklearen Bereich nicht nur

---

<sup>120</sup> Buteux, 1983, op.cit., p.207

<sup>121</sup> U.S. Senate Report, Security Issues, 1973, op.cit., p.20

<sup>122</sup> ibid

<sup>123</sup> ibid

<sup>124</sup> ibid

die amerikanischen Verbände erfaßt, sondern das Führungssystem der integrierten NATO-Streitkräfte insgesamt ergänzt und überlagert."<sup>125</sup>

Thus it is theoretically possible for the U.S. President unilaterally to decide and to give order to release nuclear weapons and bypass NATO council and all agreed consultation procedures:

"(T)he U.S. National Command Authority authorizes NATO commanders to employ nuclear weapons but actually releases the weapons through a U.S. command structure terminating with a U.S. delivery unit or custodial team ... The dual command structure for U.S. forces in Europe, in fact, is designed to allow for unilateral U.S. control over nuclear weapons."<sup>126</sup>

The Soviets call this unambiguous position of the U.S. nuclear leadership "nuclear centralism".<sup>127</sup>

Thus it is more than doubtful whether the Federal Republic's participation in the question of first use will be secured first, regarding the consultation procedures, and secondly due to the existence of the second U.S. command structure.

In his 1986 book "Nuclear Planning in NATO - Pitfalls of First Use", Daniel Charles discusses the actual employment of nuclear weapons and the conflict between centralised political control and decentralised operational command in detail. <sup>128</sup> Charles arrives at the conclusion that the unilateral American use of nuclear weapons would be a step toward "winning the battle but losing the

---

<sup>125</sup> "Thus at the President's disposal is the well-established national military command system of the United States, that not only comprises the U.S. forces, but also complements and supersedes the command system of the integrated NATO forces." Stratmann, 1981, op.cit., p.88

<sup>126</sup> Charles, 1987, op.cit. p.134, <sup>127</sup> emphasis in the text. See also the explanatory chart of the nuclear release and authorisation command structure of William Arkin in ibid., p.135

<sup>127</sup> Stratmann, 1981, op.cit., p.87

<sup>128</sup> His analysis is headed by a popular joke at NATO headquarters in Brussels, which summarises his results: "one of the most difficult decisions confronting Soviet military planners in the event that they attack Western Europe will be whether to bomb the Alliance's headquarters or not. They probably won't, say the corridor experts, so as to ensure a maximum degree of confusion within NATO." Charles, 1987, op.cit., p.19

war."<sup>129</sup> He concedes that first use of the nuclear powers without prior consultation would be technically possible but politically imprudent.

In the case of so-called dual-key systems, the allies would possess considerable physical control over the release of nuclear weapons. Although some of the early systems did actually depend on the simultaneous operation of "keys" held by both a U.S. and a host nation officer, the term "dual-key" is misleading, since this is no longer the case with modern systems. They are arranged under a "Program of Cooperation" (POC).<sup>130</sup> In accordance with these arrangements, the United States deploys warheads of delivery systems owned and operated by the European allies. The Pershing 1A, the Lance and the artillery are arranged under this POC system.<sup>131</sup> The U.S. forces which maintain direct physical control of the warhead at all times for the host nation's delivery system, are called "custodial units". In peace time, a West German, e.g. Lance unit, practices firing missiles with dummy warheads of the same size and weight as nuclear ones. They actually never handle the nuclear warheads themselves. In wartime the U.S. custodians are supposed to turn the warheads over to West German units which then fire the missiles.<sup>132</sup> Thus, one possibility for a German veto could be either to withhold the delivery systems or to refuse firing the warheads.

A secret and unilateral use of nuclear weapons would most probably be accomplished in case of those nuclear strikes which are assigned to weapons that the United States would be most reluctant to release: ICBMs, Poseidon SLBMs assigned to SACEUR, or sea-based cruise missiles.<sup>133</sup> It would be impossible for the United States to hide its plans and actions from NATO because of "the integration of tactical command and communication networks

---

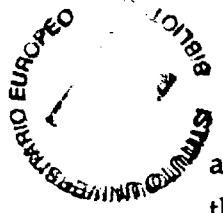
<sup>129</sup> *ibid.*, p.129

<sup>130</sup> Legge, 1983, *op.cit.*, p.11

<sup>131</sup> The Nike-Hercules, which have been replaced by the conventional Patriot system and the Atomic Demolition Munitions (ADM), which have been withdrawn, were also arranged under these POC systems, see Arkin / Fieldhouse, 1985, *op.cit.*, p.102

<sup>132</sup> For the release of the warheads the U.S. custodial team has to receive the so-called Permissive Action Link (PAL) codes which are kept by the NCA. Without the correct code entered into the PAL, the warhead will remain locked. Charles, 1987, *op.cit.*, pp.54-55

<sup>133</sup> *ibid.*, p.129



and the physical proximity of military officers from the various nations throughout the command structure."<sup>134</sup>

Furthermore, the U.S. warhead custodians depend on the allied nations armed forces for provision of perimeter security for many storage locations in Europe. Without the cooperation of the German security forces, it would be almost impossible to disperse the warheads, i.e., to bring the nuclear warheads away from the storage sites to delivery systems units. Charles concludes:

"If these allied security forces were ordered by their commanding officers to resist dispersal of the warheads by force, it would be impossible."<sup>135</sup>

Thus, the Federal Republic would not have to fear the employment of battlefield weapons for which it provides the delivery systems. However, one third of the TNF, which are deployed exclusively to U.S. forces seem to have a high chance of being employed without allied consultation and knowledge. But German apprehensions do not only refer to a "wrong" first use, but also for the delay or omission of any first use as a consequence of a U.S. veto.

### Conclusion

The different geography of the European allies and the United States results in stressing respectively the two opposite functions inherent in nuclear deterrence: the Europeans and the Germans in particular prefer the punishment function of deterrence, while the United States stresses its denial function. The result are two different interpretations of flexible response which lead to incompatible perceptions of the role of nuclear weapons which again on an operational level culminate into two incompatible first use concepts: the United States contemplates first use as late as possible, on a theatre level and to be accomplished with military effectiveness, the German envisages first use as early as possible, on a strategic level and as a means to signal to the opponent to cease hostilities. The ambiguities inherent in flexible response are also responsible for the incoherence of NATO's TNF posture.

The description of SACEUR's nuclear employment planning focused in the existence of the dual command structure for U.S. forces in Europe. Since a

---

<sup>134</sup> ibid, p.129

<sup>135</sup> ibid, p.61

unilateral U.S. release of nuclear weapons can therefore not be excluded, German apprehensions on a "wrong" first use are as warranted as the suspicion of the omission of any first use due to a U.S. veto against release. These considerations might also have induced German strategic experts and politicians to request land-deployed long-range TNF which promise to secure a quick escalation of war to the strategic level.

The next section will analyse NATO's search for a solution to these ambiguities inherent in flexible response by compromising on deploying the Pershing II and GLCM which were regarded as a means to reconcile these problems. The Federal Republic's dominant role in the evolution of the NATO-Dual Track decision will be in the focus of attention.

## **Section II: The NATO-Dual Track as a Solution: the Federal Republic's Role within its Evolution**

Section II analyses the evolution of the NATO-Dual Track in the context of NATO and the SALT process. Special attention will be given to two facts: that the LRTNF modernisation was planned as a solution to reconcile flexible response's contradictions as well as the active role the Federal Republic had in its evolution.

### **4. Evolution of the LRTNF decision within NATO**

This chapter describes how the 1979 LRTNF modernisation decision evolved in the relevant NATO organs as a consequence of their task to maintain the implementation of flexible response. It will be shown that, since the Federal Republic, although a non-nuclear state, is nevertheless a NATO ally in the Nuclear Planning Group, the German defence ministers and their staff actively participated and even prevailed with their guidelines for the first and follow-on use of nuclear weapons. The same activity and success in shaping NATO decisions was demonstrated by German delegates in the discussions on the necessity and the form of TNF modernisation. The restructuring of NATO's attitude towards TNF in the seventies was initiated by the TNF's revision proposed by U.S. Secretary of Defense James Schlesinger. These strategic requirements were effectively intertwined with technological developments offering precisely those characteristics of weapons which were needed for the TNF revision. On the basis of Schlesinger's proposals the German politicians also presented their guidelines for the TNF revision.

#### **4. 1. Evolution of the LRTNF Decision within the Nuclear Planning Group**

As a result of the failure of the MLF programme, the Nuclear Planning Group (NPG) was established in order to provide a forum in which the Alliance members could participate and influence the planning and the conduct of the use of nuclear weapons. The NPG is the crucial NATO body which prepared the LRTNF decision. The different interpretations of flexible response are reflected in the disputes over the NPG's guidelines for the first and follow on

use of nuclear weapons. It will be shown that a key document for these guidelines shows the European hand.

#### 4.1. 1. Development of the Nuclear Planning Group (1965-67)

In January 1965, several months after the demise of the MLF, U.S. Secretary of Defense Robert McNamara proposed to a NATO meeting that a select or restricted nuclear committee of "four or five alliance members"<sup>1</sup> be formed, to serve two important functions. The first would be to improve and extend allied participation in any possible use of strategic forces. The Committee's second function would be to improve communications to ensure that agreed consultations concerning a decision to use nuclear forces could take place as promptly as possible in case of war.<sup>2</sup> McNamara's use of the word "select" indicated that he conceived the group as consisting of the chosen few of the 15-nation alliance, meaning the United States, Britain, France, the Federal Republic and Italy.<sup>3</sup> After France's withdrawal from the military organisation these residual four nations plus Turkey participated in the first defence-minister level meeting of the NPG in Washington in February 1966.<sup>4</sup>

A Special Committee consisting of 10 members, which had been established as an interim organ, recommended to the NATO Council in March 1966 that two groups be formed within the Alliance: a Nuclear Defence Affairs Committee (NDAC), open to all members of the Alliance which cared to participate, and a five-member Nuclear Planning Group. The NPG would engage in planning but submit its reports to the NDAC before they were sent to the Defense Policy Committee. The U.S. intention was that the NPG would consist of the United States, Britain, the Federal Republic and Italy and one small member chosen by random selection from the NDAC. However, the Netherlands demanded an expansion of the membership of the NPG to the point where at least a Benelux seat would be assured, as a matter of effective diplomacy on the grounds, that "the larger the group, the greater the influence of the smaller members".<sup>5</sup> Thus

---

<sup>1</sup> NYT, June 1, 1965, p.1

<sup>2</sup> ibid., p.11

<sup>3</sup> For the history of the NPG see Mahncke, 1972, op.cit., pp.129-236

<sup>4</sup> Thomas C. Wiegeler, 1972, op.cit., p.473

<sup>5</sup> Robert W. Russell, "The Atlantic Alliance in Dutch Foreign Policy". Internationale Spectator, (Vol.23, No.13, Juli 8 1969), 1189-1208, p.1194

the U.S. and the Netherlands were in direct confrontation over the organisation of NATO.<sup>6</sup>

The United States refused to yield on the assignment of extra seats to small members, but did permit the membership of the NPG to be expanded to seven, thus leaving three seats to specific small states who were interested. In reality this meant that at eighteen-month intervals one seat could alternate between the Netherlands and Belgium, another between Turkey and Greece, and a third between Canada and Denmark.<sup>7</sup>

In April 1968 at the ministerial session of the NPG in The Hague it was decided that the non-permanent members could participate in the work of the NPG at the ambassadorial and staff level. This organisational modification was again achieved by the Netherlands and Canada.<sup>8</sup> It was only as late as 1979 that thirteen of the fifteen member countries (excluding Iceland and France) decided to participate on a regular basis.<sup>9</sup>

#### **4.1.2. Provisional Political Guidelines (1967-69)**

Within the scope of flexible response it was the task of the NPG to formulate political guidelines for the tactical role of TNF. Accordingly in its first phase of meetings between 1967 and 1974 the NPG concentrated on establishing guidelines for the first and follow-on use of tactical nuclear weapons in Europe as well as employment plans for singular weapons systems. In its second phase, it defined and reviewed the number and types of weapons necessary for implementing the strategy of flexible response.<sup>10</sup> The descriptions of debates in the NPG in the late sixties and early seventies demonstrate the difference between the European and U.S. interpretation of the joint NATO strategy of flexible response. The European view of flexible response even prevailed since a key document on nuclear planning was drafted without U.S. participation.

---

<sup>6</sup> For the Dutch revolt see Wiegele, 1972, *op.cit.*, p.476

<sup>7</sup> Russell, 1969, *op.cit.*, p.1196

<sup>8</sup> Mahncke, 1972, *op.cit.*, p.249

<sup>9</sup> NATO, *Facts and Figures*, (Brussels, NATO-Information-Service 1981), p.50

<sup>10</sup> For a detailed analysis of the Nuclear Planning Group see Legge, 1983, *op.cit.*, and Buteux, 1983, *op.cit.*



The establishment of guidelines for the first use of nuclear weapons, the so-called "Provisional Political Guidelines", was the NPG's most long-standing and difficult project. Only as late as 1986 were the provisional guidelines made more specific and turned into the "General Political Guidelines." However, in view of the strategy's different interpretations there are doubts, whether the compromise represented by the 1986 guidelines provides more clarity in respect of first use than the 1969 provisional ones.

At its first official meeting in April 1967 the NPG discussed the question of control over nuclear land mines. Both Turkey and the Federal Republic complained that existing decision-making arrangements for detonating the mines on the Turkish-Soviet and German-German border were too slow to be effective.<sup>11</sup> No decision was taken on this issue at that time. The meeting in April 1968 in The Hague marks a significant change, since Secretary of Defense McNamara was replaced by Clark Clifford, who did not show equal strategic profile. Moreover the defence debate in the United States strategic was dominated by questions of strategic matters and the debate on a TNF posture stagnated due to the Vietnam war. U.S. influence grew again when Clifford was replaced by Melvin Laird, but it took some time until the United States came up again with initiatives concerning the TNF doctrine.<sup>12</sup>

In Bonn in 1968, at the fourth meeting, four papers were presented for consideration: a British paper by Defence Minister Healey examining the use of nuclear weapons at sea; a West German paper by Defence Minister Schröder dealing with the battlefield use of nuclear weapons; a Greek paper devoted to questions of defence on the southern flank of the Alliance, and a U.S. study on how nuclear weapons could be used as a demonstration to threaten potential aggressors.<sup>13</sup> This was the first time that the Europeans took a major role in the presentation of strategic studies.

---

<sup>11</sup> NYT, April 8, 1967, p.8. West-Germany and Turkey reintroduced the issue during the April 1968 meeting in The Hague, see Wiegele, 1972, op.cit., p.478

<sup>12</sup> Robert de Wijk, Flexibility in Response? Attempts to construct a plausible strategy for NATO 1959-1989. Leiden, June 1989, p.103

<sup>13</sup> NYT, October 11, 1968, p.10

At this meeting the NPG also assigned to Britain and West Germany the task of drawing together the results of the four papers into a single document, containing draft guidelines for the first and follow-on use of TNF. This Anglo-German defence guideline, which was the central topic of discussion at the fifth NPG session in London in May 1969<sup>14</sup>, dealt with the question of the first use of nuclear weapons. The Healey-Schröder paper, undertaken without U.S. participation from the outset, discussed several choices from which commanders could select at the moment of need. It discussed the various options available, such as defensive use (Atomic Demolition Munition or nuclear air defence), battlefield use, use in an "extended geographical area", maritime use, etc.<sup>15</sup>

The paper argued against the U.S. point of view concerning TNF. The disputable issues in context of first use were 1. its timing, 2. its scale, 3. its target area and 4. the utility of "demonstrative" use or "shot-across-the-bow". A demonstrative use could mean a single explosion e.g. over the sea or in some remote location, which did not involve many casualties as a signal of the willingness to escalate if the warning failed. The British-German report suggested a rather early resort to TNF in a limited and demonstrative mode. According to Michael Legge, initial or first use in the Healey-Schröder concept was designed "to confront the enemy with the prospect of the risks of escalation consequent on a continuation of the conflict, with the aim of making him halt his attack and withdraw, thereby restoring the credibility of the deterrent."<sup>16</sup> However, Legge stresses that "(t)his did not imply that initial use should not have a military objective as a means of achieving its political aim."<sup>17</sup> As distinguished from the European doctrine the U.S. view preferred a massive use at a later stage<sup>18</sup>. A demonstrative use without any military effectiveness was certainly not welcome by U.S. analysts. Another essential point of dispute was the targeting area of first use: while the U.S. suggested locations only in Eastern Europe and exclusion of the Soviet Union, the Germans preferred at

---

<sup>14</sup> NYT, May 31, 1969, p.9

<sup>15</sup> See Legge, 1983, op.cit., pp.18-21

<sup>16</sup> Legge, 1983, ibid., p.19

<sup>17</sup> ibid., emphasis by S.P.

<sup>18</sup> Buteux, 1983, op.cit., p.91

first to target precisely Soviet territory.<sup>19</sup> If NATO were to hit targets "only" in Eastern Europe, the Soviet Union would not feel the same necessity and pressure to react with a strategic retaliatory strike that it would feel if Soviet territory itself was hit.

Generally NPG guidelines were not authorised to commit the alliance in advance to any particular form of nuclear response, and the word "guideline" has to be taken literally in this context. In any case, the military situation in which NATO might decide on first use of nuclear weapons would imply such complexity that only a specific choice in time of crisis was imaginable. The guidelines were said to represent a compromise between the positions of many European nations and that of the United States. Denis Healey describes this compromise as follows:

"For flexible response as it finally emerged from the bruising negotiations of the sixties, instead of ruling out first use of nuclear weapons by NATO, sought to make first use more credible by envisaging a series of discrete steps on the ladder of nuclear escalation, starting with the demonstrative explosion of a single tactical weapon somewhere in Europe and ending with the obliteration of the Soviet Union and the United States in a general exchange of strategic weapons."<sup>20</sup>

Thus according to Healey's statement the guidelines incorporated precisely the proposal of the Healey-Schröder report to start with demonstrative use which corresponds to the notion of nuclear weapons as being "political". The guidelines' language was necessarily ambiguous so as to leave space for different interpretations and the original draft's specific number of weapons for initial use had to be dropped.

#### 4.1.3. Nuclear Consultation Procedures

The Healey-Schröder paper also dealt with the consultation process between the allies in the case of NATO's first use of nuclear weapons. From 1966, the "host country veto" was an element in German policy with Defence Minister Schröder pressing for it in the newly formed NPG.

---

<sup>19</sup> The New York Times chose a wording which suggested that the U.S. view prevailed: "These guidelines for a first strike are reported to concern only targets in Eastern Europe." NYT, June 9, 1970, p.9

<sup>20</sup> Denis Healey in a Foreword of Stromseth, 1988, op.cit., p.viii

The first decision of the nuclear powers to consult their non-nuclear allies on the release of nuclear weapons was made in Athens in 1962 and resulted in the so-called famed Athens guidelines. According to these guidelines, the nuclear powers would consult their allies "time and circumstances permitting."

The Healey-Schröder paper aimed at expanding the Athens guidelines and suggested giving each member a formal right to veto the use of nuclear weapons and in particular use of those short-range nuclear systems which would be launched from the members' own territory. It stated that "any decision to use nuclear weapons should be taken in the last resort by those immediately concerned."<sup>21</sup>

Thus, the Schröder-Healey report specified NATO's original 1962 Athens guidelines on consultation which only obliged the United States to consult its allies prior to a nuclear release "time and circumstances permitting". Helmut Schmidt who in December 1969 attended his first meeting as the German representative, welcomed the Schröder-Healey paper on consultations as giving the European allies of the United States substantial influence in the nuclear sector.<sup>22</sup> However, the proposal of a veto was not accepted by the NPG and was changed in favour of one merely recommending that special weight should be given in the consultation process to the country involved.<sup>23</sup>

The Healey-Schröder reports, after revision concerning the issue of consultation, were approved by the NATO Council in December 1969 under the title of "Provisional Political Guidelines for the Initial Defensive Tactical Use of Nuclear Weapons by NATO" (PPGs). The word "provisional" in the title might have been used to indicate the Ministers' concession that these guidelines were worthless because they were not based on any concrete agreement between the NATO allies.

---

<sup>21</sup> Buteux, 1983, *op.cit.*, p.90

<sup>22</sup> According to an article in the Daily Telegraph, London, November 10, 1969, used in Buteux, 1983, *op.cit.*, p.100

<sup>23</sup> See the detailed description in chapter 3.6.3.

#### 4.1.4. Schmidt's success with the ADM

Another aspect of the NPG's early work merits recording, in particular because it was solved along the line of the doctrine of Defence Minister Schmidt got his way as far as the role of atomic landmines was concerned.

It was actually the result of a German initiative that Atomic Demolition Munitions (ADMs) was secured a top place on the NPG agenda for some years.<sup>24</sup> The German Defence Minister Kai Uwe von Hassel proposed in 1965 to install an "atomic tripwire" by deploying "atomic demolition mines, nuclear air defense weapons and, if need be, nuclear battlefield weapons" at the Eastern frontier in order to give "a last determined warning" to the enemy "without involving escalation as a consequence."<sup>25</sup> Von Hassel's proposal is based on the original plan of the then Federal Armed Staff General Trettner. This proposal is certainly the most direct equivalent of a very low nuclear threshold.<sup>26</sup> Von Hassel claimed that he had discussed the idea with McNamara and the Chairman of the Joint Chiefs of Staff. Thus, although rejected by the no-first use oriented McNamara administration, the Trettner plan secured the Atomic Demolition Munitions attention by the NPG.

Although from the same party, the German Defence Minister Schröder changed the policy line of his predecessor Kai Uwe von Hassel towards the ADMs in line of his report on first use: that it should be executed with discretion and in a tactical manner. This concept of first use differed substantially from General Trettner's idea of starting with a massive employment of Atomic Demolition Munitions along the border. However, in accordance with the Trettner-von Hassel line, Schröder pleaded for a very low nuclear threshold in which early

---

<sup>24</sup> see Rühl, 1974, *op.cit.*, p.129/130; Kelleher, 1975, *op.cit.*, 215/216 and p.303. "Sprengsätze aus der nuklearen Planungsgruppe. Die neuen Gerüchte um 'Atomminen' entlang der Grenze zur DDR erinnern an den Trettner Plan von 1964," in *Süddeutsche Zeitung* (December 7, 1969) p.3

<sup>25</sup> von Hassel, 1965, *op.cit.*, p.211

<sup>26</sup> "This means, so far as concerns the defense of Europe, in contrast to other parts of the world, that the atomic threshold must be very low", *ibid.*, p.210



use of tactical nuclear weapons would cause a quick escalation to strategic nuclear exchange.<sup>27</sup>

Helmut Schmidt was confronted with the issue of Atomic Demolition Munitions (ADMs) when asked by his NATO partners to allow "prechambering" of holes for the ADMs on likely routes for attacks of the Warsaw Treaty Organisation.<sup>28</sup> This meant a preparatory digging of holes suitable for the emplacement of ADMs.<sup>29</sup> One obvious motive for Schmidt's objection was the fact that the ADMs would detonate exclusively on German territory. He argued that although they are designed to possess extremely low explosive power they still had more fallout than other nuclear weapons.<sup>30</sup> The ADMs' military effectiveness depended upon being deployed far forward on the border with East Germany. In the event of a Soviet attack, the time available for a decision to detonate an ADM, before it was overrun by the advancing Warsaw Pact forces, was considered to be very short. As a result the nuclear threshold would be lowered considerably, since NATO would be forced to release the ADMs at a very early stage of the war. Thus, the opportunity to conduct sufficient consultations with countries involved in the conflict would be reduced to such a degree that German control of the use of TNF would be virtually nullified. Therefore Schmidt effectively diffused these NATO plans. Schmidt's refusal was interpreted as the most telling example of a shift of the new SPD-FDP government in TNF policy.<sup>31</sup>

Schmidt's success in postponing "prechambering" had the effect that it has not been accomplished on the Central Front until 1973.<sup>32</sup> In the eighties, however, the ADMs have been slated for withdrawal<sup>33</sup>, for reasons of their

---

<sup>27</sup> see Horst Mendershausen, "West Germany's Defense Policies" in: *Current History* 55, May 1968, p.268-274, quoted in Charles N. Davidson, "Tactical Nuclear Defense. The West German View", *Parameters*, (Vol.4, 1974) pp.47-57, here p.51

<sup>28</sup> *Süddeutsche Zeitung*, December 7, 1969, p.3

<sup>29</sup> Buteux, 1983, *op.cit.*, p.116/117

<sup>30</sup> Second the Federal Government has always felt uncomfortable about NATO plans to target the GDR. see *The Times*, June 9, 1970, p.4

<sup>31</sup> Davidson, 1974, *op.cit.*, p.51; Buteux, 1983, *op.cit.*, p.117/118

<sup>32</sup> U.S. Senate Report, Security Issues, 1973, *op.cit.*, p.15

<sup>33</sup> Charles, 1987, *op.cit.*, p.100; Legge, 1983, *op.cit.*, p.24

contraproductivity as operational battlefield weapons.<sup>34</sup> Since the early use of battlefield weapons is inconsistent with the German policy line, at least from Defence Minister Schröder's term of office on, Schmidt's success in this question cannot be overestimated.<sup>35</sup>

#### 4.1.5. Follow-on Use

The main issue in Venice in June 1970 was what to do in the event that first use by tactical nuclear weapons should fail to halt a Soviet invasion.<sup>36</sup> The discussions of the NPG therefore moved on to the subject of the follow-on use of nuclear weapons. In repetition of the problem the Alliance had to face in case of first use, these divergent U.S. and German preferences for the target area were applied again to the question of NATO's follow-on use. Since the guidelines for first use discussed targeting of Eastern Europe, the new West German Defence Minister Helmut Schmidt and the other European members reported to have pressed for the allocation of targets on Soviet territory at least for a second strike.<sup>37</sup>

The NPG went on to concentrate its attention on developing concrete employment and deployment plans for the TNF. The Ottawa meeting on October 1970 tried to provide further political guidance for NATO's nuclear planning, i.e. what kind of concrete weapons NATO needed and what role TNF would play in NATO strategy. Under the previous strategy of massive retaliation the role of TNF was primarily to contribute to NOP in support SIOP and to provide direct fire support to NATO's conventional forces. But with the advent of flexible response the question arose to which extent TNF should be

---

<sup>34</sup> "Atomic Demolition Munitions (ADM)s are nuclear devices that must be manually emplaced and mechanically or electronically detonated. They are used to create barriers to retard and force the concentration of attacking enemy forces. Because these weapons require suitable terrain features for optimal effectiveness, and because they must be set in place before the arrival of enemy troops, there are definite territorial and temporal limits to their usefulness in combat." Planing U.S. General Purpose Forces, 1977, *op.cit.*, p.11

<sup>35</sup> In a speech at the North Atlantic Assembly in Hamburg in November 1988, Helmut Schmidt mentioned this event as an example for effective U.S. and German cooperation in NATO. Schmidt said: "Laird understood immediately". (Personal notes.)

<sup>36</sup> NYT, June 9, 1970, p.9

<sup>37</sup> ibid

withheld for General Nuclear Release. A U.S.-German paper was tasked to find a solution to this problem. In this paper which was drafted by Secretary of Defense Melvin Laird and Defence Minister Schmidt the German concern on "decoupling" was expressed. The statements of the paper clashed with NATO military Authority, since the military men preferred the TNF's massive employment in their role for General Nuclear Release. The compromising paper, finally approved by the NPG and called "The Role of Theater Nuclear Strike Forces in Allied Command Europe", represented an important step of ensuring that the TNF's primary employment was contemplated for limited, selective release. Legge comments on the consequence of the paper:

"(T)his process was to lead eventually to the development of specific Selective Employment Plans (SEPs) for the limited use of TNF."<sup>38</sup>

In the October 1971 meeting in Brussels the effective cooperation between U.S. Secretary of Defense Melvin Laird and Defence Minister Schmidt was overshadowed by dispute: Schmidt demanded from the United States much more frank and intimate discussions about U.S. views on the nuclear defence of the treaty area.<sup>39</sup>

After the NPG's first attempt to establish guidelines on the follow-on use of nuclear weapons in Venice in June 1970, a series of studies were undertaken by groups of 3 or 4 nations. These studies were discussed in the NPG from May 1971 to May 1973.<sup>40</sup> In 1972 a Committee consisting of the United States, Britain and the Federal Republic was established in order to draw conclusions from these studies and to develop political guidelines for the follow-on use of the nuclear weapons.

After two years of debate a compromise report on follow-on use was submitted to the rest of the allies in July 1974. The report indicated that selective follow-on strikes could imply the intention of a short term military advantage and its essential message confirmed the "Political Provisional Guidelines" of NATO's first use:

---

<sup>38</sup> Legge, 1983, op.cit., p.25

<sup>39</sup> Wiegele, 1972, op.cit., p.480/481

<sup>40</sup> see communique of the NPG meeting, October 27-28, 1971, p.264 and Communique of the NPG meeting in May 15-16, 1973 in NATO-Communiques, 1949-74, op.cit., pp.288-289. See also Legge, 1983, op.cit., pp.26-28



"Follow-on use should have the same purpose as initial use (to persuade the enemy to cease his aggression and withdraw), and the nature of the use should therefore still be selective and be designed to meet this political requirement."<sup>41</sup>

Again the language of the guidelines was vague enough to avoid NATO's committing itself to a particular reaction in the test case of war.

At the Ankara meeting in May 1973 the NPG confirmed its decision of November 1969 that even a demonstrative, thus first use, should be combined with military considerations.

#### 4.1.6. German approval for military use

In the Ankara meeting of May 1973, the allies agreed to target military objects, also for NATO's first use. The Ankara meeting is honored by Rühl as the NPG's crucial and final point of return in consideration of the TNFs' value.<sup>42</sup> The TNF advanced from being considered as "only symbols of deterrence" and as a pure "appendix" of the strategic arsenal, to the rank of military instruments of a strategy "offering expedient target options."<sup>43</sup>

In this meeting, SACEUR General Goodpaster put forward a scenario to illustrate a particular option for the initial tactical employment of nuclear weapons by NATO.<sup>44</sup> He discussed NATO's current ideas on the demonstrative use of TNF, e.g. exploding Atomic Demolition Mines at sea, or the detonation of

---

<sup>41</sup> Legge, 1983, *op.cit.*, p.27

<sup>42</sup> Daalder contradicts Rühl in this point putting forward the objection that Legge, who is also a very authoritative source, refers to the Ankara meeting only as dealing with follow-on use. And follow-on use could hardly be meant only for demonstrative use. Daalder's second objective refers to the fact that the U.S. Army incorporated a "demonstration" employment option at exactly the same time. This, however, presupposes that "demonstrative use" was clearly defined along the lines of the European concept. Buteux for example indicates that "demonstration use" could also mean: "However limited the demonstration use, suggested examples have included airbursts, use against clearly military targets with little risk of collateral damage, and the limiting of attacks to a prescribed territory." Paul Buteux, 1977, *op.cit.*, p.791; Daalder, 1988, *op.cit.*, p. 285

<sup>43</sup> Rühl, 1987, *op.cit.*, p.146

<sup>44</sup> Final Communiqués, 1974, *op.cit.*, p.289

the Surface-to-Air missile Nike-Hercules at great heights in order to avoid collateral damage. Goodpaster argued that these concepts of demonstrative strikes were only feasible, if at all, with the prerequisite of U.S. strategic superiority. The allies in the Nuclear Planning Group apparently followed Goodpaster in his argument that even a demonstrative use of TNF would have to be targeted against military objects on WP territory in order to reinforce NATO's demonstration of willingness to escalate. Western deterrent credibility would be undermined if NATO omitted the use of TNFs against offensive forces and the WP's military infrastructure in the rear - at least, if such strikes promised to be militarily successful. This modification of the TNFs' role leads Rühl to the conclusion that:

"Die Überlegungen zur TNF-Modernisierung waren von nun an vorbestimmt und mußten logischerweise zum LRTNF-Bündinsbeschluß von 1979 führen."<sup>45</sup>

On the level of force development, these modifications in NPG guidelines were expressed in General Goodpaster's order for a more accurate warhead for the Pershing 1A.<sup>46</sup>

Thus, the NPG's decision to use nuclear weapons first with consideration of military requirements was obviously not rejected by the German Defence Minister Georg Leber.

#### 4.2. Restructuring NATO's TNF

In November 1973 two additional groups were established to examine the effects of the "new technologies" on the tactical nuclear forces. One group under British leadership was created in order to examine the military implications (MIT) of the new technologies, while a second group under German chairmanship analysed their political implications (PIT).

---

<sup>45</sup> "The considerations for TNF modernisation were determined and consequently had to lead to the Alliance LRTNF decision of 1979." Rühl, *op.cit.*, 1987, p.146

<sup>46</sup> Statement of Brig. Gen. Lynwood B. Lennon, USA Deputy Director, Nuclear and Chemical Matters, in: U.S. Congress Senate, Fiscal Year 1978. Authorization for Military Procurement, Research and Development, and Active Duty, Selected Reserve, and Civilian Personnel Strength, Hearings before the Committee on Armed Services, Part 9, Research and Development, 95th Congress, 1st Session, Washington D.C., March 17, 23, 29, 30, 31, 1977, p.6418; in the following: U.S. Senate Hearings, Authorization for Military Procurement, 1977

In November 1976 and June 1977 the British study on the military implications and the German study on the political implications of the "new technologies" were respectively presented in NPG meetings.<sup>47</sup> Their results confirmed the scepticism about NATO's capability for fighting a limited war. Thus they implied a comprehensive revision of weapons which would be necessary to implement the flexible response strategy. According to Lothar Rühl it had been obvious since at least 1975 that NATO did not provide the means for implementation of effective "escalation control" as demanded in the ministerial guidelines issued by the Defence Ministers of May 23, 1975. Most of the TNF never fulfilled the requirements for "escalation control" because they were too inaccurate, inflexible and vulnerable, and had a warhead which had too high an explosive power, causing self-deterrence and insecurity.<sup>48</sup>

In 1974 Schlesinger took initiative in revising NATO's TNF substantially. As a result he requested restructuring NATO's TNF forces towards an emphasis on shorter-range, lower yield battlefield weapons. Accordingly longer-range systems as nuclear capable aircraft were reduced.<sup>49</sup> These strategic requirements were effectively intertwined with technological developments offering precisely those characteristics of weapons which were needed for the TNF's revision. The resulting debate on the merits of the mininuke and the neutron weapon was answered by the German Defence Minister Leber with a definite refusal of the mininuke. On the basis of Schlesinger's proposals the German politicians also presented their guidelines for the TNF's revision in the NPG in 1976. With the combination of both the U.S. and the German revision the decision to modernise the LRTNF was clearly outlined.

#### **4.2.1. U.S. Revision of TNF**

In connection with the Defense Budget for 1975 Defense, i.e. in 1974, Secretary Schlesinger announced his "counterforce doctrine". The doctrine of Limited Nuclear Options (LNO) necessitated nuclear weapons which would guarantee an optimal combination of low collateral damage and destructive power. These

---

<sup>47</sup> Communiqué of the NPG meeting in Ottawa, June 8-9, 1977 in NATO, Texts of Final Communiqués, Vol. II 1975-80, (Brussels Information Service), p.21

<sup>48</sup> Rühl, 1980, op.cit., p.101

<sup>49</sup> Paul Buteux, 1983a, op.cit., p.65. See also Wolfgang Heisenberg, 1973, op.cit., p.2

are nuclear weapons with low yield and high accuracy, penetration capability and survivability.

For the European NATO allies these doctrinal developments were of high importance because Schlesinger's proposals also included a revision of the TNF posture and a request to NATO to restructure its TNF forces according to Schlesinger's revision.

An increase of the TNF options was foreseen via improvement of their capability for a selective and flexible employment. Thus also the TNF had to be equipped with accurate and low-yielding warheads, penetration capability and greater mobility in order to increase their survivability. Still the TNF's role was to be deemphasised in Schlesinger's counterforce strategy, in that he wanted:

- first, to reduce the huge number of 7,000 TNF systems in Europe;
- second, to reduce their role for the defence of Europe.

The modifications of the TNF in the direction of greater flexibility and selectivity were incorporated into Schlesinger's 1974 report to Congress, which accompanied the Defense Budget request for Fiscal Year 1975. The report called for:

1. improvements of the Pershing 1A by developing a smaller-yielding and more accurate warhead for the missile and upgrading its mobility, serviceability and firing response time;
2. the development of the Navy sea-launched cruise missile (SLCM) and the announcement that the air-launched cruise missile would be made available for initial deployment in the late 1970s.

The incentive for the revision of the TNF posture was Senator Sam Nunn's report on "Policy, Troops and the NATO Allies" which called into question the current TNF posture and campaigned for a strengthening of conventional and nuclear forces and the raising of the nuclear threshold.<sup>50</sup> Senator Nunn's report provided the background to his amendment to Fiscal Year 1975 which was

---

<sup>50</sup> U.S Congress Senate, Policy, Troops, and the NATO Alliance, Report of Senator Sam Nunn to the Committee on Armed Services, (Washington D.C.: U.S.G.P.O., April 2, 1974)

approved by Congress and became Public Law 93-365. It requested to examine the following issues:

1. the overall concept of employing TNF in Europe;
2. the effects of these weapons on deterrence and conventional defence;
3. a possible reduction of the TNF's size and types;
4. the development of a coordinated nuclear posture by NATO that would be consistent with an emphasis on conventional forces.<sup>51</sup>

The Nunn amendment gave Schlesinger the welcome opportunity to provide a public account of the doctrine. His report, delivered to Congress on April 1, 1975, provided an extensive public presentation of U.S. nuclear policy. The general background to U.S. strategy was explained, as well as the way in which theatre nuclear doctrine had evolved within that strategy. However, the report did not include precise information about the types and amounts of weapons needed for this revised TNF posture. The following actions were suggested by Schlesinger:

1. pursuit of a more stable balance of forces in Europe through arms control negotiations;
2. modernisation and improvement of NATO's conventional forces;
3. restructuring of NATO's theatre nuclear forces in order to improve survivability, provide for greater military effectiveness in combined conventional-nuclear conflict, improve command and control, reduce collateral damage and increase the security of nuclear weapons in peacetime;
4. updating of doctrine and plans for theatre nuclear operations in the light of improved WP forces and NATO's improvements of its conventional forces;
5. revision of plans and doctrine for employing strategic forces in order to improve the deterrence of escalation in limited conflicts and to increase

---

<sup>51</sup> For the text of the Nunn Amendment see U.S. Congress Senate, Fiscal Year 1976 and July-September 1976 Transition Period Authorization For Military Procurement, Research and Development, and Active Duty, Selected Reserve, and Civilian Personnel Strengths. Hearings before the Committee on Armed Services, 94th Congress, First Session on S.920, Part 5, Manpower, (Washington D.C.: U.S.G.P.O. March 6,7,11, 1975) p.2218

the military support which strategic forces could render to NATO in a limited conflict.<sup>52</sup>

#### **4.2. 2. New Technological Developments: mininuke and neutron weapon**

In the seventies, weapons technology was evolving rapidly and the diversity of this change was extreme. These developments were to be applied to conventional as well as nuclear weapons. The most significant developments were taking place in the following areas: precision guidance, remote guidance and control; munitions improvements; target identification and acquisition; command, control and communications; and electronic warfare.<sup>53</sup> New conventional munitions were offered and enhanced destruction capability combined with the reduction of unwanted blast effects.<sup>54</sup>

There is consensus in the strategic community that a miniaturisation of nuclear weapons blurs the psychologically important nuclear threshold and the distinction between a conventional and nuclear war. Critical voices warn that thus the pace of war would be speeded up.

Proposals for a new generation of TNF suggested a combination of miniaturised low yield guidance with a low collateral damage which would be even less than that produced by conventional weapons. A key accomplishment of this development was the mininuke which is characterised by a combination of high accuracy and a refined low-yield warhead. There never existed an accepted definition for these mininukes, which were produced by the Los Alamos laboratory. The NPG defined mininukes as "fission weapons having a

---

<sup>52</sup> Secretary of Defense James R. Schlesinger, The Theater Nuclear Force Posture in Europe. A Report to the United States Congress in Compliance with Public Law 93-365, (Washington, D.C. April 1, 1975)

<sup>53</sup> The term "Precision-guided Munitions"(PGM) describes a class of bombs, missiles and artillery projectiles which possess a considerably increased accuracy and have "single-shotkill" probabilities ten to a hundred times greater than "unguided" munitions.

<sup>54</sup> Discussion on the tactical and technological possibilities of mininukes and related conventional technologies can be found in Richard Burt's, "New Weapons Technologies. Debate and Directions", Adelphi-Papers, No.127, (London: International Institute for Strategic Studies, Summer 1976); Cecil I. Hudson and Peter H. Haas, "New Technologies: The Prospects", in Holst/Nerlich (eds.), 1977, op.cit., p.107-148;

Yield equivalent of 50 tons of TNT and the accuracy (CEP) of 1 m.'"<sup>55</sup> Other sources referred to 10-100 tons or even 100-500 tons.<sup>56</sup>

If used in combination with precision guided conventional weapons, strong advocates of the mininuke, such as Colin S. Gray from the Hudson Institute and the Los Alamos laboratory, considered them as a sufficient means against armoured units. The TNF posture was regarded as insufficient by them because TNF's high yield and inaccuracy made their use less than credible. In view of the impossibility of defending Europe conventionally the Los Alamos team campaigned for massive and early use of the mininukes:

"The strategy proposed in this article departs radically from present plans to try first to defend conventionally in Europe: it calls for immediately engaging the attacker with low-yield nuclear weapons for all but the most trivial incursion."<sup>57</sup>

The Los Alamos team represented the so-called group of "nuclearists" in the United States. As advocates of war-fighting concepts they are interested in a decoupling of the European theatre from the U.S. strategic forces. Accordingly the Los Alamos team advised excluding the option of hitting Soviet territory with U.S. forces and recommended withdrawal of U.S. forces with an appropriate range:

"We must exclude the planning option of using U.S. nuclear forces in Europe - primarily our Quick Reaction Alert (QRA) aircraft - which are capable of

---

<sup>55</sup> Jorma A. Miettinen, quoted in Joachim D.C. Fesefeldt, Die nukleare Schwelle. Mythos oder Wirklichkeit?, (Herford und Bonn: Mittler und Sohn, 1984), p.65

<sup>56</sup> 1000 tons TNT = 1 KT, 1000 KT = 1MT, ibid.

<sup>57</sup> W.S. Bennett, R.R. Sandoval and R.G. Shreffler (three members of the Los Alamos Laboratory), "A credible nuclear emphasis defense for NATO", in: Orbis, (Vol. 17, No.2, Summer 1973), p.463-479, here p.465. The Los Alamos study group proposed an immediate employment of nuclear short range missiles with a range of 75 kilometres with warheads of about 0,25 kt. By a computer simulation they found that of 24 attacking tank companies, 20 would be destroyed after 20 minutes. Radiation would affect an area only of 1,000 metres so that neither friendly soldiers nor the civilian population would be tremendously damaged. This attack would have to be executed 15 minutes after Soviet tanks pass the border. Release of these weapons could no longer be authorised by Central Command, since, in view of the 24 hours a nuclear release would take, corps and division commanders must be allowed to decide on their own to release nuclear weapons, see Rühl 1974, op.cit., p.418. See also Colin S.Gray, "Mini-nukes and strategy", in: International Journal, (Vol.29, No.2, 1974a), pp.216-241.

striking the territory of the USSR. To this end, such forces now in Europe should be removed."<sup>58</sup>

The nuclear war must be fought exclusively on the battlefield with weapons having a very accurate delivery system:

"We contend that a nuclear-defensive war by NATO, fought in proximity to the border with low-yield weapons and discriminating delivery systems, would result in a short conflict."<sup>59</sup>

This trend of "conventionalisation" of nuclear weapons stimulated a revival of the debate in the U.S. strategic community between the conventionalists and nuclearists. The long-standing questions upon which these camps focus are whether (first) a conventional defence against the Warsaw Pact in Central Europe is generally possible and whether (second) it is possible to fight and control a tactical nuclear war in this region within bearable limits. Mainly because of the lack of depth, which is regarded as indispensable for fighting a conventional war, nuclearists do not believe in the military feasibility of winning a purely conventional war in the Central Region.<sup>60</sup>

While the U.S. administration was continuously seeking improved accuracy and reduced yield of TNF, "a mini-nuke program as such did not exist."<sup>61</sup> Support and campaigning for the mininukes dwindled with the awareness of the weapons' insufficient destruction power by virtue of its low-yield warhead.<sup>62</sup> Another concern of arms control circles, namely that the distinction

---

<sup>58</sup> Bennett et.al., 1973, op.cit., p.471

<sup>59</sup> ibid. p.475

<sup>60</sup> For a detailed description of the debate between conventionalists and nuclearists, see Fesefeldt, 1984, op.cit., pp.46-59; Krell/ Schlotter, 1977, op.cit.

<sup>61</sup> Evidence of Secretary of Defense Schlesinger, U.S. Congress, Senate, Nuclear Weapons and Foreign Policy, Hearings before the the Subcommittee on U.S. Security Agreements and Commitments Abroad, and the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, 93rd Congress, 2nd Session on U.S. Nuclear Weapons in Europe and U.S.-U.S.S.R. Strategic Doctrines and Policies, Washington D.C., March 7, 14, April 4, 1974, p.208-209, in the following: U.S. Senate Hearings, Nuclear Weapons and Foreign Policy, 1974

<sup>62</sup> Fesefeldt, 1984, op.cit., p.259



between nuclear and conventional weapons would be blurred by the mininuke, seemed to have contributed to the renunciation of the weapons' development.<sup>63</sup>

Instead, a fusion weapon, the enhanced radiation weapon (EWR) or "neutron bomb" received much more support. The difference between the original fission weapon and a fusion weapon lies in the different effects of blast, heat and radiation: "(W)hereas the fission warhead relies heavily on blast and heat output, the dominant neutron warhead effect is in the form of an instantaneous burst of nuclear radiation - neutrons."<sup>64</sup> Because of its reduced collateral damage, the neutron-bomb was therefore also called a "clean" bomb. Thus, the neutron bomb was warmly welcomed; it implemented the principle of limiting collateral damage:

"The basic advantage of neutron weapons over current fission weapons would be a reduction in noncombatant casualties and in physical damage to their material assets."<sup>65</sup>

It was planned to use the neutron weapons for the 203mm (8 inch) and 155mm howitzers and the Lance missile which are deployed in the Federal Republic. The Lance has a range of 80 miles (128 km). The 155mm and 203mm howitzers, in their role as classical artillery battlefield weapons, were introduced in the early sixties<sup>66</sup> and the modernisation of the 155mm, which has not yet been completed, is subject to public debate today. The modernisation of the 203mm

---

<sup>63</sup> "U.S. to renounce 'Mini' Atom Arms", in New York Times, May 24, 1974, p.1

<sup>64</sup> S.T. Cohen, The Neutron Bomb: Political, Technological and Military Issues, (Cambridge, Washington: Institute for Foreign Policy Analysis, November 1978) p.v

<sup>65</sup> ibid., p.v and vi

<sup>66</sup> Hoffmann, 1986, op.cit., p.104

howitzer started in 1986<sup>67</sup>. A neutron warhead has been produced for the Lance which is deployed in the United States.

The German Defence Minister Leber raised the issue of mininukes at the Ankara NPG meeting 1973. He was against the mininukes. He stressed that no important distinctions between the various kinds of nuclear weapons should be drawn:

"The first use of nuclear weapons would mean a change in the kind of war being fought, and one should really not draw important distinctions between the various kinds of nuclear weapons."<sup>68</sup>

Leber was convinced that a "single atomic hand grenade" would cause escalation to the most powerful nuclear weapons. Another objection against the mininukes was their grave problems of command and control. It was feared that the authority to use these weapons might be predelegated to the battlefield commander. This was against the Germans' principle of a political control of nuclear weapons.<sup>69</sup>

However, it was precisely the Europeans who requested the development of the neutron weapon by the United States. Leber, in his memoir, reports that in 1970 the Europeans demanded that the United States drop production of dirty nuclear weapons, and, in their place, develop something easier to handle, i.e. the so-called neutron weapon.

"Von europäischer Seite wurde im Jahre 1970 verlangt, die USA sollten versuchen, anstelle der 'schmutzigen' Nuklearwaffen etwas zu entwickeln, was

---

<sup>67</sup> "Congress approved funding for production of a new 155 mm nuclear artillery shell (the W-82). A provision of the Senate version of the spending measure removes a restriction, dating from 1985, which set a \$1.2 billion limit on funding for the nuclear W-79 (203 mm) and W-82 artillery shells. The W-79 has already been produced, so the removal of the restriction -- a move meant 'exclusively to ensure the safety and security of the warheads' -- will apply solely to the W-82. The funding level for the W-82 is classified, but William Arkin, the author of several studies of nuclear weapons, estimates that the program will cost \$900 million over a three-year period. Congressional sources calculate the cost of each shell at \$4-5 million." British American Security Information Council, The 1990 U.S. Defense Budget and Nato Nuclear Modernization, Washington D.C., London: October 1989

<sup>68</sup> quoted in U.S. Senate Report, Security Issues, 1973, op.cit., p.23.

<sup>69</sup> see de Wijk, 1989, op.cit., p.110

sich für einen Verteidiger besser handhaben lasse. Die USA entwickelten die Nuklearwaffen weiter und nannten diese Fortentwicklung Neutronenwaffen."<sup>70</sup>

Thus there is an apparent contradiction in the German position: whereas they were extremely sensitive to ADMs and mini-nukes,<sup>71</sup> which both belong to the category of limited battlefield weapons, they seemed to have been interested in small warheads which - at least theoretically - may be assigned to delivery systems with a longer range. The principle of limiting collateral damage which is implemented by warheads with low yields is a constant feature of German TNF policy since small warheads guarantee selective employment. The employment of weapons with an enhanced radiation warhead, however, only make sense in a battlefield situation. Thus these these inconsistent observations cannot be explained sufficiently.

Inspector General Harald Wust confirmed in an interview that the neutron bomb has never been criticised by the Germans in the NPG and DPC meeting.<sup>72</sup> Furthermore it is a fact that in 1977 the German government approved the deployment of the neutron bomb for the Lance missile on German soil, however, whether for military or arms control reasons cannot be said with validity.

Leber always pleaded strongly for flexible response's axiom of first use. In a Senate Hearing U.S. Defense Secretary Schlesinger asserted that the Germans including Georg Leber had always been interested in receiving reassurances from the United States that tactical and strategic weapons would be available for use in the event of a threat. Whether CDU or SPD dominated governments there had been no change in the German desire "for assurance that nuclear

---

<sup>70</sup> "On the part of the Europeans it was requested in 1970 that the United States should try to develop something else instead of the 'dirty' nuclear weapons which would be more feasible for the defender. The United States proceeded with the refinement of nuclear weapons and called this development the neutron weapon." Georg Leber, Vom Frieden, (Stuttgart: Seewald-Verlag, 1979) p.287. For confirmation of the German request for the neutron weapon see Lothar Rühl, "Die Nichtentscheidung über die 'Neutronenwaffe'. Ein Beispiel verfehelter Bündnispolitik." Europa-Archiv, No.5, 1979, pp.137-150.

<sup>71</sup> U.S. Senate Report, Security Issues, 1973, op.cit., p.26

<sup>72</sup> communication by Harald Wust to Hubertus Hoffman, on December 6, 1984 in: Hoffmann, 1986, op.cit., p.213. Hoffmann describes the German participation in the debate on the neutron weapon, ibid., pp.156

weapons will be used in defence of Germany under those circumstances".<sup>73</sup> Leber himself explicitly expressed the necessity for an early first use:

"Wenn der Westen mit einer konventionellen Übermacht angegriffen wird, und wir könnten uns mit konventionellen Waffen nicht verteidigen, dann gehöre ich nicht zu denen, die für einen solchen Fall sagen: Lassen wir uns halt von deren Übermacht überrollen und werden kommunistisch, sondern dann muß zu einem frühen Zeitpunkt ein atomares Signal gesetzt werden."<sup>74</sup>

This was reaffirmed in his response as part of the "gang of four" responding to the plea of U.S. colleagues for a no-first use policy.

Still Leber had always pursued a policy line of strengthening NATO's conventional arms and not regarding nuclear arms as a substitute for reinforcing conventional weapons.<sup>75</sup> He pleaded for a high nuclear threshold and advocated the employment of precision guided conventional weapons with a destruction power equivalent to that of nuclear ones. In 1976 he predicted that the nuclear threshold would be substituted by a "technological threshold" which could be perceived as very low.<sup>76</sup>

At the NPG meeting in Bergen June 1974 the allies were informed by U.S. Secretary of Defense Schlesinger with regard to "some technological developments that could bear on the tactical nuclear capability of the Alliance."<sup>77</sup> They were briefed on the advanced cruise missile, the enhanced radiation weapons and on Precision Guided Munition. European interest focused on the cruise missile. The interest of the British was due to their plans to modernise the aging U.S. long-range fighter bomber fleet, as it was unlikely that the planes could actually carry out their allocated war time missions<sup>78</sup>.

---

<sup>73</sup> U.S. Senate Hearings, Nuclear Weapons and Foreign Policy, 1974, *op.cit.*, p.188

<sup>74</sup> Emphasis by S.P., "If the West is attacked with a conventional preponderance and we cannot defend ourselves with conventional weapons, then I do not belong to those who say in such a case.: let us be overrun and let us become communist. Rather, I am one who supports the creation of a nuclear signal for an early stage." Interview with Defence Minister Georg Leber, *Der Spiegel*, (Vol.29, No.38, September 15, 1975) p.27

<sup>75</sup> Leber, 1979, *op.cit.*, p.303

<sup>76</sup> Defence Minister Leber in the *Frankfurter Allgemeine Zeitung*, April 10, 1976, p.1,2

<sup>77</sup> see Communique of the NPG meeting, June 11-12, 1974 in NATO-Communiques 1949-74, *op.cit.*, p.309

<sup>78</sup> *The Sunday Times*, February 6, 1983, p.17

Bonn also demonstrated interest in the cruise missile - thus awakened before the specter of the SS-20 appeared on the horizon.

#### 4.2.3. German revision of TNF

In reaction to these developments of the TNF's revision towards shorter-range systems for selective use, the German guidelines proposed land deployment of systems with a longer range to avert the Federal Republic's possible role as a battlefield.

Lothar Rühl describes the German guidelines for TNF modernisation presented to the Nuclear Planning Group in 1976. According to Rühl, the German delegation took the initiative and developed a comprehensive policy concept. The decisive criterion for the Germans was the compatibility of political and military requests.

The following German guidelines were approved by the NPG in 1976:

- compatibility of the TNF arsenal with NATO's overall strategy;
- consideration of the WP's increasing TNF capacities and the resulting new options for the WP;
- the provision of a substantial arsenal of nuclear weapons and delivery systems for a variety of options and flexibility in the context of escalation;
- harmonisation of the objectives of the TNF forces with NATO's offer at MBFR in December 1975 to unilaterally withdraw 90 long-range TNF delivery systems and 1,000 nuclear warheads.<sup>79</sup>

As a main task, the German TNF concept envisaged studies on the coordination between NOP and SIOP and the planning of options for deliberate escalation. TNF should be able to give a "sensible signal to the offensive forces" of the attacker which might have the greatest chance to induce the attacker to terminate hostilities. A massive use of battlefield TNF for the destruction of WP offensive forces was rejected by the Germans. According to WP doctrine, a massive employment of nuclear weapons would be inevitable in a war. The Germans, however, argued that this part of the WP doctrine was merely

---

<sup>79</sup> Rühl, 1987, *op.cit.*, p.159

declaratory and aimed at intimidating the Western nations. It would be much more realistic to assume that the Soviet Union would not be interested in a nuclear war with the United States and, therefore, would not start any preemptive strikes against NATO's nuclear forces as long as it had to take into account nuclear strikes, not just against its nuclear forces, but also against its own territory.

On the basis of these guidelines, the Germans demanded NATO's modernisation of the TNF along these lines:

- securing TNF's survival;
- participation of all NATO members in nuclear strikes against the attacker in Europe;
- limitation of the collateral damage;
- variety of options and flexibility;
- distribution of TNF over as wide an area as possible and with as many NATO members involved as possible; and
- sufficient numbers for an optimal composition of the TNF, for a reserve, for the necessary diversification of the employment means and for repetition in order to compensate for potential losses.

The aim of the German concept was obvious - to avoid plans for fighting a war in which Central Europe would become a battlefield, and to avoid the Federal Republic assuming a unique role in nuclear issues in Europe.

As early as 1976, LRTNF modernisation was initiated by German members of the NPG:

"Die Bundesregierung hatte sich in Gestalt des Bundesverteidigungsministers Georg Leber schon im Laufe des Jahres 1976 weit auf das Feld des Landstationierung moderner Flugkörpersysteme mittlerer Reichweite und Angriffsfähigkeit gegenüber der Sowjetunion vorgewagt."<sup>80</sup>

According to Rühl, the years 1976/77 were the most important period in respect of German participation in the TNF modernisation; in this respect, it was a time during which German influence in the NPG reached its peak. Also in SALT the German politicians were active along the line of their strategic doctrine.

---

<sup>80</sup> Emphasis by S.P., "As early as 1976, the Federal Republic, represented by Defence Minister Leber, advanced the idea of land deployment of intermediate-range modern missiles with a capability to attack the Soviet Union." *ibid.* p.167

### 5. The LRTNF Decision as a Result of U.S. -German Conflicts over SALT

The SALT agreements were of major importance for the U.S. administrations in the seventies and they were not willing to impair this process by provoking the Soviet Union or by establishing unnecessary stumbling blocks in the negotiations. For the Europeans, however, arms control agreements in the strategic field did not have a high priority on the political agenda. They intervened in the SALT process by articulating their strategic interests. While they were publicly silent about the lack of concern for their interests in the complete SALT process, West German politicians, above all, participated actively behind the scenes. In SALT-I, the German politicians requested that the United States exclude the FBS from the negotiations; in SALT II, they pressed for the preservation of the option of long-range sea- and especially of ground-launched cruise missile. In both cases these German security interests were considered by the United States: the FBS were excluded from the SALT negotiations and the deployment of long-range ground- and sea-launched cruise missile was banned only for three years, while their testing and developing were allowed.

In 1969 the superpowers started negotiations over their strategic offensive arms, which led to the signing of SALT-I (Strategic Arms Limitation Talks ) in 1972. With this treaty the superpowers agreed to freeze the number of launchers for intercontinental ballistic missiles (ICBM) and for sea-launched ballistic missiles (SLBM) for a period of five years, until October 1977.<sup>1</sup> In the seventies

---

<sup>1</sup> SALT I yielded two documents, both signed by Nixon and Brezhnev at the summit meeting of May 1972. The first was a treaty limiting the defensive capability of each side by restricting the superpowers' antiballistic missile (ABM) defences. The second was an "Interim Agreement Between the United States of America and the Soviet Union of Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms" which froze the number of launchers for ICBMs and SLBMs. The Interim Agreement contained no figures for the number of ICBMs to be frozen. SALT II began six months after the signing of SALT I. SALT II's objective was to replace the five-year interim agreement with a comprehensive treaty of indefinite agreement. At Vladivostok in November 1974 Ford and Brezhnev issued a communique on the framework for SALT II. The key features of the accord were a ceiling of 2,400 for total offensive strategic launch vehicles and a subceiling of 1,320 launchers for multiple warheads. The Soviet Backfire and cruise missile were left undefined by the Vladivostok accord. Thus the cruise missile and the Backfire came to share the "grey area of Vladivostok" definition. See Strobe Talbott, Endgame. The Inside Story of SALT II. (New York/San Francisco/London: Harper & Row, 1979), pp.21-35. For the precise wording of SALT see Bundesminister der Verteidigung, Weißbuch, 1983, Zur

negotiations were held for a follow-up agreement, the SALT II treaty, which was signed by General Secretary Brezhnev and U.S. President Jimmy Carter in 1979. However, SALT II was never ratified by the U.S. Congress.

The record of European reactions to SALT since 1969 is remarkably sparse:

"Bisher hatte man es in Europa vermieden, zu den Verhandlungen über eine Begrenzung der strategischen Nuklearwaffensysteme (Strategic Arms Limitation Talks: SALT) öffentlich Stellung zu nehmen. Vorbehalte europäischer Regierungen wurden in der Regel nicht öffentlich vorgetragen."<sup>2</sup>

This dearth of reactions might be explained by the ambiguity which the European strategic community and politicians felt about SALT. On the one hand the Europeans felt committed to detente. They were afraid to appear publicly as an obstacle to the codification of a SALT agreement because it might have provoked a deterioration in European-Soviet relations.<sup>3</sup> On the other hand they wanted a full consideration of their own security concerns. West Germany, in particular, was faced with the agonising problem of how it could best influence the SALT process without arousing deep domestic and allied concern over West Germany participating in nuclear policy.

These negotiations between the superpowers were accompanied by considerable difficulties in agreeing on the kinds of weapons to be limited by

---

Sicherheit der Bundesrepublik Deutschland. (Bonn: Presse- und Informationsamt der Bundesregierung, 1983), p.225. For the history of SALT-I see John Newhouse, Cold Dawn: The Story of SALT. (New York, Chicago, San Francisco: Holt, Rinehart and Winston, 1973)

<sup>2</sup> "So far in Europe a public stance with regard to the Strategic Arms Limitation Talks (SALT) had been avoided. Any reservations on the part of the European governments were not expressed publicly." Heinrich Buch, "Die Rolle der Bundesrepublik bei SALT - Mitspieler oder Zuschauer?" in Haftendorn et.al. (eds.), Verwaltete Außenpolitik. Sicherheits- und entspannungspolitische Entscheidungsprozesse in Bonn. (Köln: Wissenschaft und Politik, 1978), p.115-134, here p.115. For a similar view see also David S. Yost, European Security and the SALT Process. The Washington Papers, Vol.9, (Beverly Hills/London: Sage Publications, 1981), p.26

<sup>3</sup> Kissinger interprets the Europeans' dilemma concerning SALT as a result of the pressure exerted by both superpowers: "Each has been urged, if not pressed by the (U.S., S.P.) administration to express support. In some cases, the Soviets have added their entreaties. Refusal to comply would thus risk relations with both superpowers over an issue that is of high technical complexity and has been under negotiation for seven years...They do not want to be perceived as an obstacle to SALT II..." U.S. Congress, Senate. Committee on Foreign Relations. The SALT II Treaty. Hearing, Part 3, 96th Congress. (Washington D.C.: U.S.G.P.O., 1979), p.157-158 quoted in Yost, 1981, op.cit., p.28



SALT and on a definition of what "strategic weapons" are. These difficulties applied to negotiations not only between the superpowers, but also within the NATO Alliance. Perceptions differed wildly as to what systems were really at stake in the SALT negotiations, and what kind of agreements had to be considered concerning these systems.

Before we will discuss these European interventions in the SALT process, the structure of the SALT consultations and the West Germans' room for manoeuvre within these bilateral negotiations between the superpowers shall be briefly described.

### **5.1. Offer for an extension of the Consultation process**

The question of the extent to which the Federal Republic, as a non-nuclear and not completely sovereign state, had the opportunity and the room to manoeuvre to influence bilateral negotiations like SALT certainly requires clarification. It will be demonstrated that in contrast to public perception, there was sufficient organisational infrastructure to provide a basis for intensive U.S. consultations with the European allies.<sup>4</sup> Moreover, the Europeans did not react to an U.S. offer of direct participation in the SALT negotiations.

A routine treatment of SALT was given in the NATO Council, within the frame of the so-called SALT Forum. In the NATO Council the Federal Republic was represented by a permanent German delegate and by representatives of section 220 of the Ministry of Foreign Affairs (disarmament and arms control) and the section FüS-III, 5 of the Ministry of Defence (limitation of armament and arms control).

For bilateral U.S.-German consultations in the German embassy in the United States a Political Study Group (PSG) was established. The participating West Germans were representatives of the embassy in Washington, the Chief of the Planning Staff of the Armed Forces (Leiter im Planungsstab) in the Ministry of Defence and official consultants from the respective sections in the Ministry for Foreign Affairs and the Ministry of Defence who represented the Federal

---

<sup>4</sup> For a detailed description of consultations in the alliance see Meier, *op.cit.*, 1986, pp.106-128

Republic. Occasionally the Ministers of Defence and of Foreign Affairs joined the PSG.<sup>5</sup>

U.S. Secretary of State Cyrus Vance describes the quality of consultation between the United States and its allies as sufficient:

"Previously, consultations had been carried out by routine briefing. Now, under the Carter administration, no SALT issue of importance to European security (such as the transfer of nuclear weapons technology to our allies) was resolved without advance consultations with all members of the alliance. The consultations were not limited to those issues that were regarded as NATO concerns, and the discussions were not simple briefings. They included a full exchange of views in which the allies' opinions were sought."<sup>6</sup>

In December 1977, at the bi-annual ministerial level NATO meeting, Secretary of State Cyrus Vance proposed consideration of multilateral arms talks between East and West on European LRTNF and discussed with the British, West-German and French Foreign Ministers to set up a new forum for consultations within NATO.<sup>7</sup> But Vance's offer was met with an astonishing indifference on the part of the Europeans. No plausible reasons have been given as yet for the Europeans' failure to come up with a reaction to this offer. Garthoff writes about the reception of Vance's proposal:

"Regrettably, nothing further was done to develop those proposals. Secretary Vance had intended his initiative to allow the Europeans to decide whether they would prefer to participate directly in SALT III, in which it was expected that LRTNF would be discussed, or that the United States continue to negotiate alone with close consultation. No immediate decision was needed, so none was taken. As a result, events moved on their own."<sup>8</sup>

While one may justifiably doubt the seriousness of Vance's proposal, the casualness with which German researchers touch on the Federal Republic's nonchalance concerning this important issue is astonishing. Haftendorn just

---

<sup>5</sup> Buch does not say when the PSG was founded. Buch, 1978, op.cit., here p.130

<sup>6</sup> Cyrus Vance, Hard Choices (New York: Simon & Schuster, 1983), p.67

<sup>7</sup> Garthoff, 1983, op.cit., p.210. Vance does not mention his offer in his memoirs, he merely mentions that "(m)ore direct participation by the allies was a necessity. We understood that the United States did not face, as some had tried to suggest, a choice between European security and SALT: The interests went hand in hand". Vance, 1983, op.cit., p.67

<sup>8</sup> Garthoff, 1983, op.cit., p.210

comments: "Dieser Vorschlag wird damals jedoch nicht aufgegriffen."<sup>9</sup> Risse-Kappen explains the reluctance of the West German officials to respond to this proposal in terms of their fear that negotiations about the INF system outside the framework of SALT would support a decoupling process.<sup>10</sup>

This reaction is, however, not untypical of the Federal Republic's policy in the nuclear field, which could be characterised by its ambition to achieve too many goals at the same time. On the one hand the West Germans are continuously anxious about the lack of consideration of European interests in bilateral negotiations. On the other hand they do not want to be associated with weapons aggressively directed against the Soviet Union since this would jeopardise their detente policy with the East.

---

<sup>9</sup> "However, this proposal was not taken up." Helga Haftendorn, Sicherheit und Stabilität. Außenbeziehungen der Bundesrepublik zwischen Ölkrise und NATO-Doppelbeschuß. (München: Deutscher Taschenbuchverlag, 1986), p.31

<sup>10</sup> Risse-Kappen, 1985, op.cit., p.26. Eventually the negotiations took place without the allies' participation and outside the framework of SALT.

## **5.2. The Federal Republic's Interest in FBS**

It will be argued here that it was mainly the Europeans, in particular the West German politicians, who insisted on the exclusion of the FBS from the original SALT-I agreement. The effect of this was the emergence of the so-called "grey area" problem of the "intermediate-range nuclear forces" (INF), which were covered neither by SALT nor by the MBFR negotiations on conventional weapons. The "grey-area" weapons were eventually and successfully dealt with within the framework of the negotiations which in December 1987 culminated in the INF treaty.

The 1979 NATO Dual-Track decision was accelerated and legitimised by the deployment of the Soviet Eurostrategic missiles in 1975, which was motivated in part by the inappropriate treatment of intermediate-range weapons in SALT I. An agreement to dismantle the U.S. FBS and Soviet medium-range missiles in SALT I would have - according to this logic - obviated the deployment of Pershing II and ground-launched cruise missile in Europe, which prolonged the potential dangers and real costs of the arms race for another decade.

### **5.2.1. Another cycle of concern about the U.S. guarantee**

In NATO the European allies seem to experience cycles of concern about American leadership. The debate on excluding FBS from the SALT I agreement in the beginning of the 1970s was just one more manifestation of such anxiety, generated by European fears that Soviet/American efforts to limit intercontinental strategic arms in SALT I would be achieved at the expense of European defence options and would undermine the American nuclear guarantee.

SALT also fed European apprehensions about a "bilateralism" between the superpowers achieved at the cost of European security and interests. What was feared was an implicit understanding between the superpowers that neither would henceforth initiate the use of nuclear weapons except for the direct

defence of its own territory or that they would agree to exclude any use of their strategic weapons and thus limit the nuclear war to Europe.<sup>11</sup>

A whole system of agreements and treaties between the United States and the Soviet Union in the beginning of the seventies, like the Renunciation of Force Treaty, the Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War and an Agreement on the Prevention of Nuclear War<sup>12</sup>, contributed to European suspicion.

Major Heinrich Buch, a researcher at the University of the Bundeswehr, forcibly expresses the European concern over these agreements, as follows:

"Beide Prozesse haben die Wirkung, daß sie die Vormachtstellung der Supermächte absichern. SALT ist daher ein zentrales Instrument, mit dem die nuklearen Hegemonialmächte ihr globales sicherheitspolitisches Kondominium abstecken und strukturieren."<sup>13</sup>

The codification of mutual deterrence in the SALT agreements, combined with the loss of U.S. nuclear superiority, was perceived by the Europeans as a further erosion of their nuclear guarantee and thus as a "decoupling" of Europe from the United States' "umbrella".

European statesmen see this "coupling" between the United States and West Europe as inherent in the presence of American troops in Europe, who are above all regarded as hostages. West Germany has been troubled by any American move to withdraw these forces.

The second and more decisive link to the U.S. nuclear umbrella consists, in the Europeans' view, of U.S. nuclear forces deployed on European soil and –most decisively– well within striking range of Soviet territory.

With this as a background it is not astonishing that the U.S. FBS forces were also considered as indispensable for the link to the U.S. nuclear umbrella.

---

<sup>11</sup> Andrew J. Pierre, "Can Europe's Security be 'decoupled' from America?" Foreign Affairs, (Vol.51, July 1973), pp.761-777, here p. 761

<sup>12</sup> Buch, 1978, op.cit., p.118 and Ruehl, 1974, op.cit., p.335

<sup>13</sup> "Both processes have the effect of backing up the superpowers' hegemony. Thus SALT is a central instrument with which the nuclear hegemonic powers define and structure their global political condominium." Buch, 1978, op.cit., p.119

### **5.2.2. Political and Strategic Value of the FBS**

Early in the discussions about a SALT agreement, the Soviet Union indicated that the negotiations must deal with all strategic nuclear forces, which they defined as those capable of reaching the homeland of the other. Thus the FBS, i.e. U.S. nuclear strike aircraft and land-based missiles able to reach the Soviet Union, would have to be included. There are no fully comparable Soviet FBS capable of reaching the United States.

This definition of "strategic weapons" was one of the basic problems of the SALT negotiations. The different geography of the superpowers, with the Soviet Union being encircled by the United States' allies, makes it logical that the Soviet Union should consider all U.S. nuclear weapons that can reach targets in the Soviet Union as "strategic", no matter what their origin. It may be, however, that this view only creates problems, since there seems to be no reason why Western European nations should not be just as concerned about nuclear weapons that can reach their countries. That means that the Soviet Union's tactical nuclear aircraft are as much a matter of concern to NATO Europe as FBS are to WP Europe.<sup>14</sup> Milton Leitenberg defines FBS as follows:

"The phrase 'forward based systems' is used to describe those longer range US 'strike' or 'attack' aircraft which the US bases in Europe or on aircraft carriers, which are specifically designated as nuclear weapons delivery systems and whose range permits them to reach targets within the USSR."<sup>15</sup>

These elements made up the U.S. FBS in the mid-seventies:

- the F-111 aircraft based in the United Kingdom;
- F-4 aircraft in Turkey, Northern Italy and in the Federal Republic of Germany;
- aircraft-carrier based A-6s and A-7s in the Mediterranean;

---

<sup>14</sup> Leitenberg, 1986, *op.cit.*, p.144

<sup>15</sup> Emphasis by S.P. Leitenberg, 1978, *op.cit.*, p.117. The phrase has also been used somewhat loosely at times to refer to all NATO aircraft capable of reaching the Soviet Union, but its correct meaning is in reference to U.S. aircraft only; see Leitenberg, 1986, *op.cit.*, p.142. Leitenberg is referring here to NATO committed F-4 squadrons on call in the United States.

In contrast to Leitenberg Uwe Nerlich considers it as debatable whether also the Pershing 1 missiles could be categorised as FBS systems.<sup>16</sup>

A 1979 U.S. Senate Hearing indicated the number of U.S. tactical aircraft to be over 1,000. They were composed of 800 F-4, 300 F-111, 67 FB-111 aircraft and 12 carrier air wings which included a total of 400 planes with nuclear delivery capability (120 A-6 and 280 A-7 aircraft).<sup>17</sup>

Now it is difficult to define which of these more 1,000 tactical aircraft belong to the "Forward Based Systems". Among the military experts there seems to be agreement only on one criterion: the aircraft has to be capable of delivering nuclear weapons. The other criteria appear to be very debatable :

1. a deployment area from which the aircraft can strike targets in the Soviet Union;
2. a two-way mission capability of the aircraft; which means that the aircraft is technically able to return to its home base after its mission.

However, under extreme conditions it is certainly also possible to find pilots for one-way missions.<sup>18</sup> Concerning the first criterion it is questionable whether only those systems should be counted which in peacetime are physically within reach of Soviet targets or whether systems should be included which can be brought to Europe within hours in the case of a crisis. In a U.S. Senate Hearing a further aspect is considered:

---

<sup>16</sup> The Pershing 1A, which will be withdrawn as a result of the INF treaty, creates special problems for its categorisation because of its range of 740 kilometres. Therefore the Pershing 1A is only included in the FBS systems under rather "theoretical assumptions" because "(i)n Central Europe Pershing missiles could be based close enough to Soviet territory to acquire FBS quality, but in fact are not. Deployment of Pershing, e.g. to Turkey, would raise different kinds of problems." Uwe Nerlich, The Alliance in Europe. Part V. Nuclear Weapons and East West Negotiation, Adelphi-Paper, No.120, (London: International Institute for Strategic Studies, Winter 1975/76), p.4 and see also Pierre for confirmation, 1973, op.cit., p.765, that the Pershings with a 450-mile range could strike into the Ukraine if they were positioned closer to the border

<sup>17</sup> U.S. Senate Hearings, Military Implications, 1979, op.cit., p.96

<sup>18</sup> Concerning the two-way mission capability Pierre asks: "The unstated assumption of defense planners is that all missions would be two-way, capable of returning to friendly soil. This excludes a large number of shorter-range aircraft plus the Soviet medium-range bombers which might reach the United States if their return were abandoned. But is such exclusion a valid assumption for all conceivable crises?" 1973, op.cit., p.765

"Given appropriate warning time, additional USAF (US Air Force, S.P.) aircraft could fly to Europe and four more carriers could be brought forward. This would roughly double the number of nuclear capable aircraft forward based in a position to strike the Soviet Union."<sup>19</sup>

These additional forces are usually not included in the estimates. It is probably unnecessary to go further into technical details about the FBS. A quotation from the U.S. Senate Hearing demonstrates the labyrinthine complexity of this issue:

"There is a difference, however, in an aircraft having the technical capability to strike the Soviet Union and in having an operational mission to do so. Whether or not these aircraft actually would be utilized to strike the Soviet Union would depend on a number of factors: e.g., how they have trained and their primary mission tasking, mission flight profiles, the provision of external fuel tanks, whether a particular mission is one-way or includes a return, how far forward the aircraft are staged. Technically, all these aircraft can strike targets deep in the U.S.S.R. - if they are based far enough forward, carry external fuel tanks, and/or execute one-way missions. With the exception of the F-111 which in any case would be able to strike targets in the U.S.S.R. from its operating bases and return, the capability of these tactical aircraft to strike deep into - or in many instances, even to reach - the U.S.S.R. and return is highly dependent on the factors cited above."<sup>20</sup>

In view of the complexity of the issue it is astonishing that the figure of the FBS is usually indicated as 500-630 aircraft.<sup>21</sup> The figure is composed of the following elements: of the 300 existing F-111, 150 are deployed in Europe; of the 800 F-4, 60 are deployed in South Korea and another 300 in Europe. Four aircraft carriers are usually deployed afloat in the Western Pacific and in the Mediterranean Sea, and their 40 A-6 and 80 A-7 aircraft could be targeted against the eastern part of Soviet Union.<sup>22</sup> This, according to the 1979 U.S. Senate Hearing, gives a total of about 630 aircraft which are actually forward based and which could be directed against the Soviet Union.

From the Soviet perspective the military value of the FBS is quite unambiguous. For the Soviets the FBS embody their sensitive geostrategic position between

---

<sup>19</sup> U.S. Senate Hearings, Military Implications, 1979, op.cit., p.96

<sup>20</sup> ibid.

<sup>21</sup> The Senate Hearing indicated 630 aircraft, ibid., while Pierre counts 565 systems, 1973, op.cit., p.765

<sup>22</sup> For the technical data of the aircraft see Thomas B. Cochran / William M. Arkin / Milton M. Hoening, Nuclear Weapons Databook. U.S. Nuclear Forces and Capabilities. Vol.1. (Cambridge, Massachusetts: Ballinger 1984), pp.207-210, pp.232-233, pp.215-216



four nuclear adversaries, three of which do not participate in SALT. To give an idea how the Soviets might feel about the FBS, one may be reminded of the United States' dramatic reaction when the Soviet Union based middle-range weapons in a "forward" mode on the territory of its Cuban ally. The FBS played a key role during the fifties and sixties, "because they could get to Russia hours before any bomber from Omaha could, and before those early Soviet missiles could be fueled with their liquid propellants."<sup>23</sup> This means that 20% of the industrial capacity and population of the Soviet Union could be destroyed by FBS alone.<sup>24</sup>

Richard Burt also reflects on the European interest in the FBS:

"During the first round of SALT, one of the sensitive issues within the Alliance was the possibility that, in an agreement, the Nixon Administration might sacrifice its freedom to maintain or improve forces earmarked for the defense of NATO... Had the Administration agreed to limit FBS aircraft in the 1972 agreements, European governments would have perceived this as an American decision to pursue superpower arms control at the expense of NATO defense."<sup>25</sup>

Due to the Europeans' interest in the FBS the United State's handling of the FBS issue "was seen as the one indicator of future accountability to European interests of American strategic power in Europe."<sup>26</sup>

### 5.2.3. The FBS's relationship to SALT negotiations

Uwe Nerlich gives more specific evidence for the fact that the Europeans demanded the exclusion of the FBS from the SALT negotiations.

"Only a few years ago Western European governments were upset over the prospect of SALT limitations applying to long-range theatre nuclear forces.

:

---

<sup>23</sup> Malcolm W. Hoag. Forward-Based Nuclear Systems in NATO in Historical Perspective. Lessons for SALT III. P-6426. (Santa Monica, California: Rand Corporation, May 1980), p.10

<sup>24</sup> Pierre, 1973, op.cit., p.766

<sup>25</sup> Richard Burt, "The Scope and Limits of SALT", Foreign Affairs, (Vol.56, No.4, July 1978), pp.751-769, here p.764/765. See also Nerlich, 1975/76, op.cit., p.4

<sup>26</sup> ibid.

They did not demand the inclusion of Soviet SS-4 and SS-5 for fear that forward-based systems (FBS) would have to be included in SALT I."<sup>27</sup>

The reduction of the 700 Soviet intermediate and medium range nuclear missiles (IBM/MRBM) was a second major European interest within the SALT negotiations.<sup>28</sup> They consisted of the SS-4 with a range of 1,800 kms and the SS-5 with a range of 3,500 kms. Thus both were able to hit targets within Europe. Their final exclusion from SALT is closely linked to the FBS issue, insofar as the Soviet IR/MRBM could only have been included if negotiations on the FBS had been included as well.<sup>29</sup>

Raymond Garthoff, at that time Secretary of the U.S. SALT I delegation, is able to give further support to the understanding (of history) that the Europeans and not the United States were the first to insist on the exclusion of the FBS. In a letter Garthoff affirms that the U.S. originally wanted to reduce the Soviet IR/MRBMs, but later dropped this plan:

"Q.: Was the US proposal to limit Soviet IRBMs, MRBMs and SLCMs part of the April 1970 approaches, or was it introduced in direct response to the Soviet attempt to include the US Forward Based Systems (FBS) in a SALT agreement?

A.: The US proposal to limit Soviet IRBMs, MRBMs and SLCMs was part of the April 1970 approaches, and was not introduced in response to the Soviet attempt to include FBS. We had, in fact, made known our preference that such systems be included in information exchanges even before SALT talks began in 1969. The Soviet side, in turn, had made very clear its view on FBS in 1969. After consultation with our NATO allies, we dropped the proposal to limit these systems as part of our effort to exclude FBS."<sup>30</sup>

---

<sup>27</sup> Nerlich, 1980, op.cit., see also Heinrich Buch: "Der Wunsch der Europäer, die amerikanischen Nuklearsysteme im Vorfeld der strategischen Waffen (Forward Based Systems: FBS) weiterhin für die eigene Sicherheitspolitik nutzen zu können, führte 1971 zur Ausklammerung der FBS aus den SALT-Verhandlungen mit der Sowjetunion, dem bisher wichtigsten Ergebnis von Konsultationsprozessen im Bündnis." ("The desire of the Europeans to continue using the FBS for their own security policy, in 1971 led to the exclusion of the FBS from the SALT negotiations - the most important result, thus far, of consultations within the Alliance." Buch, 1978, op.cit., p.116.

<sup>28</sup> These 700 IRBM/MRBM consisted of 100 SS-5 and 600 SS-4. After having been already phased down considerably, the residual SS-4 missiles were included in the INF treaty. "INF Treaty" USIS Wireless File, Embassy of the United States of America, Brussels (December 8, 1987)

<sup>29</sup> Buch, 1978, op.cit., p.125.

<sup>30</sup> Kakan Karlsson, SALT I: Förenta staternas och Sovietunionens beteende i de första förhandlingarna om begränsning av strategiska vapen. (Linköping, Sweden:

For Milton Leitenberg there is no doubt that NATO was mainly responsible for the dropping of the U.S. proposal:

"Diese Vorschläge wurden von den NATO-Verbündeten, insbesondere der Bundesrepublik, zurückgewiesen."<sup>31</sup>

In interviews West German officials offered Leitenberg a different version: Had the Soviet Union been willing to include its SS-4/5 missiles they claimed that the American FBS could have been negotiated as well. However, this version is not very convincing in view of the evidence of the material.

Lothar Rühl presents a chronology of these events which differs from that of Garthoff. He suggests that already between 1967 and 1969, the Johnson and Nixon administrations had decided to exclude these Soviet systems:

"Als zwischen 1967 und 1969 die erste amerikanisch-sowjetische Verhandlung über eine Begrenzung der strategischen Rüstungen (SALT) vorbereitet wurde, entschieden die Administrationen Johnson und Nixon, die sowjetischen Mittelstreckenraketen SS-4 und SS-5 nicht in die Verhandlungen einzubeziehen, obwohl die Sowjetregierung alle US-Waffensysteme, die von vorgeschobenen Startbasen aus sowjetisches Gebiet erreichen könnten (Forward Based Systems=FBS) in die Begrenzungen einzusetzen suchte."<sup>32</sup>

However, Rühl also does not deny that the Europeans withdrew their demand because of their interest in preventing a reduction of the FBS:

"Die NATO-Partner stimmten 1969 darin überein, SALT nicht mit den SS-4/5 zu belasten, um nicht die amerikanischen FBS in die SALT Begrenzungen hineinzuziehen."<sup>33</sup>

---

Department of Social Science, Linköping University, 1979), pp.326-328, Letter from Ambassador Garthoff to Kakan Karlsson

<sup>31</sup> "Any suggestion of FBS inclusion was resisted by the NATO allies particularly by the Federal Republic." Leitenberg, 1986, *op.cit.*, p.144. Rühl points out that there were debates on this question in the Socialist-Liberal coalition government. Without saying precisely what position was advocated by which party Rühl affirms that Minister of Foreign Affairs Walter Scheel as late as 1972 demanded the inclusion of the Soviet IR/MRBM in the SALT negotiations. Rühl, 1987, *op.cit.*, p.211

<sup>32</sup> "When between 1967 and 1969 the first American-Soviet negotiations on limitations of the strategic forces started, the Johnson and Nixon administrations decided not to include the Soviet MRBMs SS-4 and SS-5, although the Soviet Union tried to include the FBS systems in the SALT reductions." Rühl, 1983, *op.cit.*, p.48

<sup>33</sup> "In 1969 the NATO allies agreed not to burden SALT with the SS4/5 missiles in order not to include the FBS in the SALT reductions." *ibid.*

Rühl suggests another reason why the Europeans might not have insisted on inclusion of the Soviet IR/MRBMs. There was no doubt about the technical inferiority of the SS4/5, expressed in their massive warheads, their unreliability, vulnerability and their lack of accuracy.<sup>34</sup> Therefore they were supposed to be phased out sooner or later, which actually happened step by step.<sup>35</sup> This dismantling of the SS-4/5 is used by Rühl as an argument to explain why the Europeans did not feel the need to insist on its inclusion. However, in view of the reality of arms control this argument is only of limited validity. The intentions of arms control negotiations are not distorted if the treaty's loopholes and "grey areas" are used for a modernisation of the residual weapons and a compensation of the loss of options. The modernisation of the SS-4/5 had been overdue since the early seventies. Thus the replacement of the SS-4/5 by the SS-20 could have been foreseen, although the extent of the modernisation necessitates an answer to the question of why the Soviet Union decided to modernise and what strategic options the SS-20 were supposed to implement.<sup>36</sup>

Also Paul Buteux finds it ironic that the Europeans pressed the United States to start arms control negotiations on the TNF while they were opposed to the inclusion of the FBS:

"There is an irony in the fact that as the result of the politics of the modernization decision, the United States came under strong allied pressure to seek an arms control agreement covering TNF when previously these same allies had resisted Soviet attempts to include forward based systems in the SALT negotiations."<sup>37</sup>

In this context it seems to be evident:

---

<sup>34</sup> *ibid.* For the same argument see Ian Smart, "Perspectives from Europe", in Mason Willrich and John B. Rhinelanders, (eds.), SALT. The Moscow Agreements and Beyond, (New York: The Free Press, 1974), pp.185-208, p.294

<sup>35</sup> The SS-4 and SS-5 were reduced considerably during the seventies and sixties, the SS-5 were even phased out at the end of 1983. See Der Bundesminister der Verteidigung, Weißbuch 1985. Zur Lage und Entwicklung der Bundeswehr, (Bonn: Presse und Informationsdienstamt der Bundesregierung 1980), p.55

<sup>36</sup> see Curt Gasteyger, Searching for World Security. Understanding Global Armament and Disarmament, (London: Frances Pinter, 1985), p.63

<sup>37</sup> Buteux, 1983a, *op.cit.*, p.111

- that the United States preferred an inclusion of Soviet intermediate and medium-range nuclear systems not in reaction to, but independently of Soviet insistence on inclusion of the FBS;
- that the Europeans preferred to neglect the Soviet IRBM/MRBM in order not to take the risk of a renunciation of the FBS<sup>38</sup>;
- that the European allies - at least - share responsibility for the exclusion of the FBS systems.

Corresponding to the sparse records concerning European and especially West German reactions to SALT, Leitenberg states that "although this was well known to policymakers, there was little or no written evidence for it and most books written on SALT slight the entire subject."<sup>39</sup>

The FBS were a continuous obstacle for the arms control negotiations of SALT.<sup>40</sup> In the Vladivostok agreement of 1974 Brezhnev renounced the inclusion of FBS, a step which paved the way for SALT II.<sup>41</sup> Since the modernisation of the SS-20 can be viewed, at least in part, as an answer to the FBS - according to the logic of the arms race - this very breakthrough and victory of the U.S. position and the exclusion of the FBS from SALT induced the deployment of the SS-20 with no controls on numbers.

Around 1977 the phrases "grey area" and "Eurostrategic weapons" began to be used in the West to refer to Soviet weapons targeted on Western Europe, which were not covered by SALT, and which might have been covered if the United States had not neglected them. The Soviet Union's production and deployment of the Backfire bomber and SS-20 served as key legitimization for the deployment

---

<sup>38</sup> However, it has to be conceded that if the Soviet Union had been serious about obtaining reduction of the FBS systems, it would have had to offer its IRBM/MRBM missiles and its short-range submarine launched cruise and ballistic missiles, which it never did. See Leitenberg, 1986, *op.cit.*, p.146

<sup>39</sup> *ibid.*, p.144

<sup>40</sup> "Brezhnev said that American forward-based nuclear systems (FBS) and all medium-range systems in Europe, British and French as well as American, must be discussed in SALT III." Garthoff, 1985, *op.cit.*, p.735

<sup>41</sup> The Soviet concession, which was considered as a victory for the U.S. position, was compensated for by a U.S. concession: the United States had to give up its pursuit of a cutback in the Soviet heavy missiles, see Talbott, 1979, *op.cit.*, p.33 and 205

part of NATO's 1979 Dual-Track decision. Thus an appropriate treatment of the "grey area" problem as early as SALT I would have contributed to the possibilities of obviating the whole roundabout process by which the superpowers deployed and then dismantled the dangerous and, not least, expensive land-deployed ballistic and cruise missiles.

### **5.3. Disagreement over the long-range cruise missile in SALT II**

With the ratification of SALT I in 1972 and the Vladivostok accord of 1974 a situation which had already been foreseen and feared by NATO allies for several years became a reality - the change from U.S. nuclear superiority to strategic parity with the Soviet Union. This codification of strategic parity accentuated - according to some analysts in the United States and Europe - the imbalances between the Warsaw Treaty Organisation and NATO Europe in respect to conventional forces. In fact, the codification of parity was criticised both in the United States and in Europe.

In 1974 in Vladivostok, Ford and Brezhnev issued a communique on the framework for SALT II which was signed by Carter and Brezhnev in June 1979. The Europeans disagreed with several points of the final SALT II proposal:

- one disagreement stemmed from Article XII of the SALT II Treaty concerning the non-circumvention clause, which forbade a transfer of nuclear technology from one SALT partner to a third partner;
- the codification of symmetrical ceilings on the strategic level was disapproved by the Europeans because of what they saw as the unconstrained Soviet build-up of conventional and nuclear forces targeted against Western Europe.
- Article II of the Protocol forbade the deployment of land- and sea-based cruise missiles with a range exceeding 600 kilometres, to which the Europeans strongly objected. They regarded the cruise missile as a vitally needed option on the Eurostrategic level<sup>42</sup>.

---

<sup>42</sup> See Josef Joffe, "Why Germans support SALT." *Survival*, (Vol.21, No.5, September-October 1979) pp.209-212, here p.209, one of the few European articles admitting problems with SALT II.

Francois de Rose, French Ambassador to NATO from 1970-75, complained as well that these European apprehensions had not been published, since

"(t)o this writer's knowledge there has not been one official comment in Europe over the provision limiting the range of land-based cruise missiles to 600 kilometers".<sup>43</sup>

Corresponding to the Europeans' different evaluation of the political and military value of SALT, there was also a remarkable discrepancy between the public and private views of many European government officials.<sup>44</sup> However, in spite of their ambiguous attitude, only a handful of these officials supported a rejection of SALT II. Most favoured U.S. Senate resolutions or amendments to the treaty rather than an outright rejection. Even former Defence Minister Wörner, who stated an unusually strong case against SALT II, said that the rejection of SALT II would be "inappropriate".<sup>45</sup>

### 5.3.1. Development of the cruise missile

The cruise missile originated in the Pentagon's endeavours to circumvent SALT. In June 1972, Defense Secretary Melvin R. Laird asked for and received supplementary appropriations to begin work on weapons that would compensate for barriers built up by the newly signed SALT I.<sup>46</sup>

"With the signing of a strategic arms limitation agreement in 1972 the exploitation of cruise missile technology also became intertwined with future negotiating strategies at the Strategic Arms Limitation Talks (SALT). The disappointment that the terms of the first round accords elicited from conservative sectors of American opinion and the Nixon Administration's emphasis on negotiating from a 'position of strength' prompted the further development of cruise missiles as both a 'bargaining chip' for the next phase of the talks and a 'hedge' against the possible breakdown of negotiations."<sup>47</sup>

---

<sup>43</sup> Francois de Rose, "The Future of SALT and Western Security in Europe." Foreign Affairs, (Vol.57, No.5, Summer 1979) pp.1065-1074, here p.1066

<sup>44</sup> Yost, 1981, op.cit., p.27

<sup>45</sup> ibid.

<sup>46</sup> "In a recent appearance before the House Military Appropriations subcommittee, Secretary of Defense Melvin R. Laird spoke vaguely of the need for certain 'additional hedges for the future', in light of the terms of the Soviet-American arms limitation accords." William Beecher, "Major-War Plans are being revised by White House" New York Times, August 5, 1972, p.L9

<sup>47</sup> Richard Burt, "The Cruise Missile and Arms Control", Survival, (Vol.18, No.1, January/February 1976b), pp.10-16, here p.11

The U.S. administration had decided to develop more accurate and powerful warheads for the existing Minuteman and Poseidon missiles (MIRV and MARV technology) and a new type of strategic weapon, the cruise missile, a small unmanned jet plane that in one version could be fired from a submarine along a very low flight path, delivering its nuclear warhead after about 1,000 miles.<sup>48</sup> According to Robert J. Art and Stephen E. Ockenden the military services did not want cruise missiles since they threatened what they regarded as their respective dominant missions. Based on interviews they conclude that "(t)he long-range air-launched cruise missile (ALCM) was rammed down the throat of the Air Force" and that the Air Force got stuck with the GLCM, since the Army refused responsibility for them. The Navy concentrated on the mission of carrier-based aircraft and did not want the sea-launched cruise missile. Instead, the cruise missiles' development was supported by high-level political figures in the Pentagon, the White House, and even the U.S. Department of State:

"For individuals operating at this level in the American government, the driving factors were negotiations with the Soviet Union on SALT I and II, the concern expressed by NATO's European members about the reliability of America's foreign policy and the credibility of the U.S. nuclear umbrella over them in the era of strategic parity between the superpowers, and White House anticipation of adverse congressional action on SALT II if this new technology were not developed to its fullest...As a consequence of this dichotomy between service resistance and high-level political pressure, the American government during the SALT II negotiations from roughly 1973 until 1977 was bargaining hard for systems that the services did not want."<sup>49</sup>

The cruise missile as another example of the "inexorable technological imperative that drives the arms race"<sup>50</sup> was started in 1972 by the U.S. Navy with the development of the first of the present generation of nuclear-armed cruise missiles - the "Tomahawk" sea-launched cruise missile built by General Dynamics. In 1973 the U.S. Air Force followed with the development of an air-launched version by Boeing, although the technical difference between the air- and sea-launched version is marginal.<sup>51</sup> The Boeing design was chosen as the

---

<sup>48</sup> Beecher, 1972, op.cit., p.L9

<sup>49</sup> Robert J. Art and Stephen E. Ockenden, "The Domestic Politics of Cruise Missile Development, 1970-1980" in: Richard K. Betts (ed.), Cruise Missile. Technology, Strategy, Politics, (Washington D.C.: Brookings Institution 1981) p.359-413, here p.359-360

<sup>50</sup> ibid., p.359

<sup>51</sup> Ulrich Albrecht, Kündigt den Nachrüstungsbeschluß! Argumente für die Friedensbewegung, (Frankfurt am Main: Fischer Verlag, 1982), pp.58



model for the air-launched cruise missile. In January 1977, the Deputy Secretary of Defense directed the Air Force and Navy to place their cruise missile programmes under a single Joint Cruise Missile Project Office, with the Navy as the leading service.<sup>52</sup> This resulted at the same time in the Department of Defense decision directing the Navy to enter Full Scale Engineering Development of both the sea-launched Tomahawk cruise missile and the ground-launched cruise missile for the Air Force mission.<sup>53</sup> The cruise missile was deployed in Britain, Belgium, Italy and the Federal Republic. The sea-launched version, which is the only dual-capable version of the cruise missile, has been deployed since 1984.

### 5.3.2. The ban on the cruise missile

European apprehensions that the Ford (and later Carter) administration could put a ban on the cruise missile in order to achieve SALT II had been building up since the Vladivostok agreement. Secretary of State Henry Kissinger pressed for increased funds for cruise missile development because he considered the missiles to be an ideal bargaining counter, which meant that the United States could promise to cancel development or deployment of the cruise missile in exchange for reductions in Soviet strategic forces development. Initially, the ALCM was the most prominent object, but by 1976 the SLCM and GLCM had developed equal visibility in the SALT negotiations. All three versions played a role as bargaining counters. Over the seven years of SALT negotiations (from 1973 to 1979) the U.S. executive branch developed a seemingly endless number of SALT II packages to offer the Soviet Union. The bargaining started during the Vladivostok agreement in which the Soviets expected something valuable in exchange for their renunciations of the inclusion of the FBS in the agreement. In exchange, they requested that all air-to-surface missiles and ground- and sea-launched cruise missiles with a range over 600 km should be banned. The Vladivostok accord could be interpreted as an agreement to the limitation on cruise missiles in that the United States accepted limitations on air-launched missiles, but without clarifying whether that term referred to cruise missiles or

---

<sup>52</sup> For overviews of the cruise missile's development see: U.S. Senate Hearings, Authorization for Military Procurement, 1977, op.cit., p.6380-6416. And see also E.H. Conrow / G.K. Smith / A.A. Barbour, The Joint Cruise Missiles Project: An Acquisition History. Prepared for the Joint Cruise Missile Project Office. Rand Corporation R-3039-JCMPO, (Santa Monica, California, August 1982)

<sup>53</sup> US. Senate Hearings, Authorization for Military Procurement, 1977, op.cit., p.6394

ballistic missiles. A ballistic missile, as opposed to a cruise missile, is guided over only part of its course. The United States did at first agree to count cruise missiles against the 2,400 ceiling for air-to-surface missiles with a range greater than 600 kilometres, but later clarified the term 'air-launched-missiles' as meaning ballistic air-to-surface missiles.<sup>54</sup> Thus, the Vladivostok agreement - although initially hailed as a breakthrough in the negotiations - later proved to have incorporated a bone of contention with its failure to include a definition of "air-launched missiles". Another flying machine was not defined in the Vladivostok accord and thus came to occupy the "grey area" of the Vladivostok definitions. It was the Soviet Backfire bomber, finally excluded from the SALT agreement like the SS-20 and also part of the Soviet medium-range threat against Europe.<sup>55</sup>

The European apprehension concerning potential restrictions on the cruise missile was fed anew by Kissinger's January 1976 proposal which offered to count bombers armed with cruise missiles in the subceiling agreed to in Vladivostok as an exchange for 250 Backfires for a period of five years. Kissinger's offer included the idea that ALCMS with ranges over 2,500 kilometres and SLCMs and GLCMs with ranges over 2,000 kms would not be deployed. The Soviets countered with a 600-km limit for the SLCM and GLCM and apparently did not oppose the 2,500 km range limit for the ALCM. But Secretary of Defense Donald Rumsfeld and Fred Ikle, the Director of Arms Control and Disarmament Agency, investigated Kissinger's proposal and rejected it because of the compromise that limited the sea-launched cruise missile for at least five years, if not permanently.<sup>56</sup> The Pentagon fought also

---

<sup>54</sup> Talbott, 1979, *op.cit.*, p.35

<sup>55</sup> The TU-26, also called Backfire, first observed in 1969, is a twin-engined, swing-wing supersonic airplane, see *ibid.*, p.33. It began to enter service in 1974 amid a great deal of uncertainty abroad as to what its operational capabilities and primary mission might be. The problem was to define what is a "heavy bomber". Ford and Brezhnev agreed that the Soviet MY-Bison and TU-20 Bear as well as the American B-52 and its follow-on, the B-1, would be all considered "heavy bombers" and thus included, but that medium range bombers like the American FB-111, F-111 and the Soviet TU-2 Blinder and its follow-on, the TU-26 Backfire, would not. The problem was that while in the Soviet view the Backfire's primary mission was to hit Chinese and European targets, air-fueling or forward bases in Cuba could render Backfire capable of attacking targets in the United States, thus allowing the definition of the Backfire as a strategic system. See Jane M.O. Sharp, "Understanding the INF Debacle: Arms Control and Alliance Cohesion" in *Arms Control* (Vol.5, No.2, 1984) p.95-127, p.111

<sup>56</sup> Art/Ockenden, 1981, *op.cit.*, p. 396 Talbott, 1979, *op.cit.*, pp.36/37

hard for the option of the ground-launched cruise missile, as confirmed by James Thomson, member of the National Security Council:

"In the course of attempts to justify within the US government the country's right to deploy a long-range GLCM, Pentagon civilians posited a theatre nuclear mission for the system, which at that time was not even in development."<sup>57</sup>

In January 1977 President Carter took office in the White House showing in his inaugural address his well-known scepticism about nuclear weapons by his call for complete nuclear disarmament.<sup>58</sup> Carter also committed himself to proceed rapidly to a SALT agreement.

In March 1977, Secretary of State Cyrus Vance was dispatched to Moscow with a "Comprehensive Proposal". In its treatment of the cruise missile the "Comprehensive Proposal" seemed almost calculated to provoke the Soviets with its suggestion to limit all cruise missiles to a range of 2,500 kms only. Applied to ground-launched cruise missiles, this range would have been especially upsetting to the Soviets, since it would have allowed GLCMs based in West Germany to reach the Soviet Union. But the Soviets insisted on returning to Vladivostok as the basis for negotiations, and thus the initial Carter negotiating position collapsed. Consequently, the administration fashioned a new proposal in April 1977.<sup>59</sup>

The newly conceived April 1977 proposal combined a three-tier approach: a treaty, a protocol and a statement of common understanding. The Soviets would have been asked to accept temporary constraints on the modernisation of their ICBMs in exchange for temporary constraints on the cruise missile. ALCMs would appear in the treaty with a range limit of 2,500 kilometres. SLCMs and GLCMs would appear in the protocol, limited in range to 600 kilometres if they were deployed but to be tested at ranges up to 2,500 kilometres. The United States had no plans to deploy long-range sea-launched and ground-launched cruise missiles within the period of the proposed 3-year protocol and it would therefore be relatively painless to accept such a temporary ban. The final SALT II accord of June 1979 was largely identical with

---

<sup>57</sup> Thomson, 1984, *op.cit.*, p.603

<sup>58</sup> *ibid.*, p.604

<sup>59</sup> Talbott, 1979, *op.cit.*, p.68-78

the April proposal with the exception that the ALCM range limits were dropped. European apprehensions about American SALT policy were confirmed, since they feared that it would be difficult after three years to free the cruise missile from the restrictions.<sup>60</sup>

For air-launched cruise missiles (ALCM) the United States did not accept any restrictions because Carter had still not made up his mind whether to proceed with the development of the B-1 supersonic bomber. In the event of a renunciation of the B-1's production the long-range ALCM on B-52 bombers were planned as a compensation for the B-1 bombers. Today both the ALCM and the B-1 bomber are in service.<sup>61</sup>

The features of the cruise missile which worried the Soviets to the extent that their limitation in a SALT agreement seemed to be a condition sine qua non, are described by Strobe Talbott:

"Small, fixed-wing, subsonic, cheap, unmanned ... (t)his is the cruise missile, the latest manifestation of American technology and therefore the object of the latest Soviet phobia. The jet-propelled drone can be launched from sea, land or air; it would sneak under enemy radar, skimming the treetops, finding its way by retracing a preprogrammed map of the terrain below, zigging and zagging to avoid known antiaircraft installations, and homing in on its target with uncanny accuracy."<sup>62</sup>

Richard Burt, then Assistant Director of the International Institute for Strategic Studies, was the first to analyse in detail the implications of cruise missile development and he concluded that the cruise missile could provide an attractive replacement for increasingly expensive strike aircraft. Land-based cruise missiles could undertake missions of interdiction<sup>63</sup> and offensive counter

---

<sup>60</sup> see NYT, October 13, 1977, p.A9 and Talbott, 1979, op.cit., p.141

<sup>61</sup> in the end of 1987 64 B-1B bombers with 1,614 ALCM warheads and B-52G/H with 1140 SRAM warheads were deployed. Natural Resources Defense Council, Nuclear Weapons Databook, START and Strategic Modernization. Working Papers, Summit Watch Special, Washington D.C., 1987, p.30

<sup>62</sup> see Talbott, 1979, op.cit., p.34/35

<sup>63</sup> To "interdict", in the NATO definition, means "to isolate, or seal off an area by any means, to deny the use of a route of approach". U.S. Department of Defense, Dictionary of Military and Associated Terms, op.cit., p.178. Interdiction therefore "aims at isolating the battlefield, thus preventing additional enemy forces from influencing the direct (close) battle. The entire arsenal of modern warfare may be applied to interdiction: conventional, chemical or nuclear munitions, electronic warfare, deception, naval or ground operations, and so on". Per Berg and Gunilla

air operations and would not be vulnerable to the Soviet air defences. At sea they might possibly supplant the need for aircraft carriers which need large complements of attack aircraft.<sup>64</sup> These characteristics of the cruise missile -- accuracy, in-flight survivability and relatively low costs -- made the Europeans very interested in maintaining the option of deploying the long-range cruise missile.

German strategic experts regarded the cruise missile as an optimal solution for their security interests.<sup>65</sup> The missile corresponded to a crucial principle of the German strategic consensus principle and could be used on very different missions: with its potential range of over 2,500 kms and the penetration capability offered by its low altitude flight, the cruise missile is able to strike the Soviet Union from almost all potential deployment areas. Since the cruise missile is dual-capable, it can accomplish two important requirements. First it can replace expensive and aging strike aircraft for conventional missions. Secondly, it fits into the German interpretation of flexible response, i.e. the concept of launching, very early in a war, a nuclear signal to the Soviet Union that NATO is willing to escalate the conflict. Thus the cruise missile was campaigned for by those German strategists who consider land-deployed, nuclear-tipped missiles within range of the Soviet Union as an appropriate means for the implementation of the German first use concept. The cruise missiles' capability to guarantee penetration of Soviet territory and to implement conventional missions was another factor which, among German strategic experts and politicians, gave momentum to the campaign for keeping the option of the cruise missile over 600 km, although the cruise missile with a conventional mission was never deployed in Europe.

### **5.3.3. German insistence on the cruise missile**

After the April 1977 proposal the Europeans intensified their requests for technical and operational American analyses of the cruise missile.<sup>66</sup>

---

Herolf, "'Deep strike': new technologies for conventional interdiction" in World Armaments and Disarmament. SIPRI Yearbook 1984, Stockholm International Peace Research Institute, (London and Philadelphia: Taylor and Francis, 1984)pp.291-311,pp.291-292

<sup>64</sup> Burt, 1976b, op.cit., p.12

<sup>65</sup> see also Haftendorn, 1985, op.cit., pp.248-249

<sup>66</sup> see Thomson, 1984, op.cit., p.604

Richard Burt perceived such a strong European pressure that he considered the situation for the United States as a choice "between placing priority on strengthening Alliance ties and quickly obtaining a new SALT agreement."<sup>67</sup> With his statement Burt suggests that the United States had to yield to these European requests in order to gain their support for SALT II.

Leslie Gelb describes the European reaction to the planned ban on the Cruise Missile:

"America's European allies were never quite certain whether Mr. Kissinger was seeking to bargain the weapons away. When the Carter Administration acknowledged trying to do just that, they exploded. Washington was only looking after its own interests, they felt, and doing nothing to counter weapons such the Backfire bomber or SS-20 missile that could attack Europe. Cruise missile installation was urged as a tangible expression of the nuclear umbrella."<sup>68</sup>

John F. Lehman, then Secretary of the Navy and Seymour Weiss, until 1974 director of the State Department's Politico-Military Bureau, mentions West German Defence Minister Georg Leber and Minister for Foreign Affairs Hans-Dietrich Genscher as having participated in pursuing this policy line:

"According to senior European officials, our allies made clear that they preferred that cruise missile ranges would not be limited but that, if a limitation was impossible to avoid, the permitted range should be long enough to meet valid military needs. These sources indicate that West German Minister of Defence George Leber informed Secretary of Defense Brown that nothing less than a 1,500 kilometer limit would meet these criteria and that this view was later confirmed as West German policy in a communication from Minister of Foreign Affairs Hans Dietrich Genscher to Secretary of State Vance."<sup>69</sup>

Lothar Rühl interprets a statement of Georg Leber which he made in an interview in the Frankfurter Allgemeine Zeitung in April 1976, as advocating preservation of the cruise missile option with a range of more than 600 km as a

---

<sup>67</sup> Richard Burt, "The SS-20 and the Eurostrategic balance", in The World Today (Vol.33, No.2, February 1977) pp.43-51, here p.50

<sup>68</sup> Leslie Gelb, "The Little Missile that Could and Therefore is", in NYT, August 30, 1981, p.E3

<sup>69</sup> John F. Jr. Lehman and Seymour Weiss, "SALT and our NATO Allies", in Lehman, Weiss (eds.), Beyond the SALT II Failure, (New York: Praeger, 1981) pp.59-66, here p.63

delivery system for conventional warheads.<sup>70</sup> There is no doubt that "(a) significant aspect of the United States and Allied objective was to protect NATO's conventional cruise missile option for possible theatre use in the post-Protocol period."<sup>71</sup> Leber considered them as a cheap replacement for the expensive strike bombers.<sup>72</sup> In December 1977 Leber insisted publicly that the options offered by the cruise missile technology should not be prevented by a SALT agreement.<sup>73</sup>

It has to be pointed out again that the cruise missile covered requirements for nuclear and conventional missions and that therefore advocates of different strategic concepts campaigned for the long-range cruise missile. It is clear that the Federal Republic was an eager promoter of the cruise missile, but only in concert with its European allies like Norway, Italy, Britain and the Netherlands.<sup>74</sup>

Eventually, in the summer of 1977, Leslie Gelb, then Director of the State's Department Politico-Military Bureau, went to Europe to discuss a paper on the cruise missile that he had written for NATO officials. Cyrus Vance had instructed Gelb to present a balanced paper, but one that would also dampen the conviction of many in Europe that the cruise missile would solve all of NATO's security problems. Thomson describes the content of the paper as follows:

---

<sup>70</sup> "Leber: Die Abschreckung wird glaubwürdiger durch neue Präzisionswaffen" in Frankfurter Allgemeine Zeitung, April, 10, 1976, p.1 and 2. In this interview he pleads for a replacement of nuclear weapons with conventional precision guided weapons. Leber considers the use of strategic weapons after the superpowers' Vladivostok agreement "only imaginable with difficulties" and thus announces publicly his disbelief in extended deterrence. Therefore this article would be fully consistent with an advocacy of the reservation of long-range cruise missile for conventional missions, but it is not explicitly articulated in the published part of the interview. For Rühl's interpretation see "Belastungen des Amerikanisch-Europäischen Verhältnisses" in Wagner et al. (eds.), op.cit., 1983, p.50

<sup>71</sup> emphasis in the text, U.S. Congress, Senate, SALT and the NATO Allies. A Staff Report to the Subcommittee on European Affairs of the Committee on Foreign Relations. Washington D.C., U.S.G.P.O., 1979, October 1979, p.33

<sup>72</sup> Bittorf describes the event again according to the well-known pattern: Leber had been talked into buying the cruise missile by Washington. Wilhelm Bittorf, "Sie vermehren sich wie die Karnickel" in Der Spiegel (Vol.40, No.44, October 27, 1986, Part II) p.117

<sup>73</sup> Ruehl, 1980, op.cit., p.102 and see Talbott, 1979, op.cit., p.187

<sup>74</sup> Ruehl, 1983, op.cit., p.50

"The paper suggested that cruise missiles might have negative arms control implications - for example, by posing verification problems - and raised the possibility of vigorous and negative Soviet reaction to any deployments. The paper went even further in implying that cruise missile deployments might be unwise because of a 'decoupling' effect - they would suggest a Eurostrategic balance independent of US strategic forces and thus reduce the credibility of the US strategic nuclear commitment."<sup>75</sup>

But while these presentations were apparently "scrupulously fair"<sup>76</sup>, the common assumption of many Europeans was that they were intended to cultivate European support of the American SALT position and thus must have been biased against the potential of cruise missile.<sup>77</sup>

It was not only the European suspicion about the limitation of the cruise missile option which caused irritations in transatlantic relations, especially during the summer of 1977. At the same time the Carter administration tried to inhibit the proliferation of nuclear weapons by putting limitations on the fuel cycle and the fast breeder. This policy collided with German and French interests in exporting nuclear technology into countries of the third world.<sup>78</sup>

#### 5.3.4. Schmidt's public interference with the SALT process

Examining the genesis of the LRTNF decision, the observer is reminded of the historical theory according to which history is made by 'great men'. In the literature there is a special focus on the role and importance of the then Chancellor Helmut Schmidt which does not do justice to the genesis of the decision. His famed 1977 October speech is perceived as the first and at the same time the most important intervention of the Federal Republic in the whole

---

<sup>75</sup> Thomson, 1984, *op.cit.*, p.604

<sup>76</sup> see Garthoff, 1983, *op.cit.*, p.201

<sup>77</sup> see *ibid.*, p.201; Fred Kaplan, "Warring over new Missiles for NATO". *New York Times Magazine* (December 9, 1979), pp.46-90, p.55 and Art/Ockenden, 1981, *op.cit.*, p.400/401; Thomson writes about the effects of the paper: "The more the United States displayed its reluctance to press Cruise Missile on NATO, the more the allies wanted them." 1984, *op.cit.*, p.603

<sup>78</sup> Karl Kaiser, "The Great Nuclear Debate: German-American Disagreements" in *Foreign Policy*, (Spring 1987) p.83-110. For a good overview of all political transatlantic irritations (also in the economic field), see Helga Haftendorn, 1986, *op.cit.*, pp.20-23



process. However, no analysis of the NATO Dual-Track decision can renounce an attempt to interpret this famed speech.<sup>79</sup>

In his speech Schmidt examined the possible effect of strategic nuclear parity between the superpowers, as codified by SALT, would have on European security. His answer is probably the most frequently cited, and the most ambiguous, statement made by a German politician over the past ten years:

"Most of us will agree that political and military balance is the prerequisite of our security, and I would warn against the illusion that there may be grounds for neglecting that balance....Second, changed strategic conditions confront us with new problems. SALT codifies the nuclear strategic balance between the Soviet Union and the United States. To put it another way: SALT neutralizes their strategic nuclear capabilities. In Europe this magnifies the significance of the disparities between East and West in nuclear tactical and conventional weapons....No one can deny that the principle of parity is a sensible one. However, its fulfillment must be the aim of all arms-limitation and arms-control negotiations and it must apply to all categories of weapons. Neither side can agree to diminish its security unilaterally. ... We are not unaware that both the United States and the Soviet Union must be anxious to remove threatening strategic developments from their relationship. But strategic arms limitations confined to the United States and the Soviet Union will inevitably impair the security of the West European members of the Alliance vis-a-vis Soviet military superiority in Europe if we do not succeed in removing the disparities of military power in Europe parallel to the SALT negotiations. So long as this is not the case we must maintain the balance of the full range of deterrence strategy. The alliance must, therefore, be ready to make available the means to support its present strategy, which is still the right one, and to prevent any developments that could undermine the basis of this strategy."<sup>80</sup>

---

<sup>79</sup> Helga Haftendorn's background report concerning the London 1977 speech suggests that Schmidt was not responsible for the modernisation decision. Haftendorn reminds the reader of the most prominent event of those days in October 1977: the "German Autumn" when the hi-jacking of the Lufthansa Boeing 737 on October 13, 1977 by a Palestinian Command held the whole nation breathless. These events did not leave much time for preparation of the speech in the International Institute for Strategic Studies in London. The speech was mostly identical with the draft by Christian Bauer, a personal adviser to Schmidt who incorporated proposals by Walther Stützle and a paper by Lothar Rühl containing proposals for the MBFR talks. Haftendorn 1986, op.cit., p.15. Schwartz reports that Stützle had been following the debate on the European cruise missile option in some detail and had been impressed with the strategic rationale for LRTNF. Schwartz, 1983, op.cit., p.214. Lothar Rühl criticises the Schmidt speech for its ambiguities concerning its arms control approach and the mode how SALT and MBFR are interlinked. Rühl concludes: "Diese Mehrdeutigkeit erschwerte die Interpretation von Zielsetzung und Tragweite der Londoner Rede Helmut Schmidts." ("This ambiguity rendered the interpretation of the objective and the consequences of Helmut Schmidt's London speech difficult.") Rühl, 1987, op.cit., pp.225-226, here p.226

<sup>80</sup> Helmut Schmidt, "The 1977 Alastair Buchan Memorial Lecture", Survival (January/February 1978) pp.2-13, here pp.3-4

The question arose whether Schmidt with his speech intended to call the U.S. strategic nuclear guarantee into question. It is beyond doubt that he demanded parity in tactical nuclear weapons. In London, Schmidt went even further than in his May 1977 speech to the North Atlantic Council, in which he called for the establishment of a conventional balance.<sup>81</sup> An imbalance of Eurostrategic forces was pointed out by him as early as 1969:

"Das sowjetische Übergewicht im europäischen Zentralabschnitt wird durch rund 750 Mittelstreckenraketen noch verstärkt, zu denen es keinerlei Entsprechung auf seiten der NATO gibt. In diesem Punkt wird am deutlichsten, daß insgesamt und über einen längeren Zeitraum eines theoretisch kalkulierten militärischen Konflikts gerechnet, das Gleichgewicht im Zentralabschnitt Europas nur bei Einbeziehung auch der strategischen nuklearen Waffen gegeben ist."<sup>82</sup>

His October speech was subjected to various interpretations on both sides of the Atlantic. The dividing line of these interpretations is the crucial question whether Schmidt intended to establish a Eurostrategic balance exclusively through arms control or whether he called for the deployment of LRTNF. The predominating interpretation was that Schmidt advocated the establishment of a Eurostrategic balance through the deployment of the cruise missile as a counter to the SS 20. This interpretation was not really far-fetched in view of the parallel statements of his Defence Minister Leber, who publicly advocated the preservation of the option for a long-range cruise missile<sup>83</sup>. Schmidt's remark in the speech that NATO "should make available the appropriate means to

---

<sup>81</sup> See Helmut Schmidt, "Remarks by Chancellor Helmut Schmidt" in Survival, (July/August 1977), pp.177-178, here p.178

<sup>82</sup> "Soviet superiority in the Central Sector is further reinforced by about 750 medium range ballistic missiles that have no NATO counterpart. This point more than any other drives home the lesson that, looked at in general from the theoretical point of view of a conflict extended over a prolonged period of time, there can only be an overall balance in Europe's central sector if strategic nuclear weapons are drawn into the equation." Helmut Schmidt, Strategie des Gleichgewichts. Deutsche Friedenspolitik und die Weltmächte, (Stuttgart: Seewald Verlag, 1969) p.116

<sup>83</sup> Rühl argues that the ambiguities implied in the speech make interpretation difficult. To Rühl's knowledge Schmidt was interpreted both as making a request for hardware and as expressing a clear preference for abolishing the imbalance by arms control. Rühl, 1987, op.cit., p.225. See also Hoffmann's interpretation: "Er (Helmut Schmidt, S.P) ermahnte und wies auf das Problem hin, nannte aber keine Lösungsmöglichkeiten. In 1977 war Helmut Schmidt eher Mahner als Macher, Motor der Entwicklung, aber nicht Architekt der Nachrüstung." ("He (Helmut Schmidt, S.P.) admonished and pointed out problems, but he did not mention any solutions. 1977 Helmut Schmidt was more a warner, a motor of development, but not the architect of the armament decision.") Hoffmann, 1986, op.cit., (ref. chap.1,32) p.489

support its present strategy", does, however, suggest only the conclusion that he requested a hardware solution. President Carter obviously interpreted the Schmidt speech in this way.<sup>84</sup> Cyrus Vance explains the effect of Schmidt's speech on the continuing SALT negotiations:

"In October 1977, Chancellor Helmut Schmidt, whom I regard as an outstanding statesman and for whom I have the greatest respect, delivered a speech in London emphasizing the German conviction that parity in intercontinental strategic weapons and the prospect of further strategic limitations in SALT II without any constraints on the SS-20 would have a negative effect on what he called the 'Eurostrategic' balance of nuclear forces. We had hoped to conduct a study of NATO nuclear requirements in the 1970s and beyond out of the limelight, free from the pressures generated by intense public interest and scrutiny. After the Schmidt speech this was no longer possible."<sup>85</sup>

Schmidt confirmed at several occasions that his most important concern was the establishment of a military balance, which did not necessarily have to be expressed in total arithmetical equivalence for all kinds of forces and weapons. But parity had to be established in a political way.<sup>86</sup>

Schmidt, who made every effort to start the INF arms control negotiations between the superpowers in the early eighties, and who supported the INF treaty unambiguously, said in an interview that he did not envisage the Dual-Track decision in his IISS speech. He stated that he and Ford had agreed in 1975 that the SS-20 would be included in SALT II:

"In the course of 1974 and 1975, I had understood that the Russians were building up a new strategic threat against targets in Europe and the Mediterranean basin and that this would entail the potential danger of political blackmail against my country. And this led to a conversation between Gerry Ford and myself, I think it was in 1975. And he said, In my next negotiations I will include these weapons you call Eurostrategic."<sup>87</sup>

---

<sup>84</sup> Jimmy Carter, Keeping Faith, (London, Glasgow, Sydney, Auckland, Toronto, Johannesburg: William Collins, 1982) p.235

<sup>85</sup> Vance, 1983, op.cit., p.67

<sup>86</sup> Speech of the Chancellor at the United Nations Assembly, 10th special assembly of the United Nations for disarmament in Bulletin der Bundesregierung, "Rede des Bundeskanzlers vor den Vereinten Nationen", Bonn: Presse- und Informationsamt der Bundesregierung (No.55, May 30, 1978) pp.529-535, here p.530/531

<sup>87</sup> Interview "With Helmut Schmidt", by Craig Whitney, New York Times Magazine, (September 16, 1984), pp.57-130, p.92

The problem was, according to Schmidt, that the Carter administration, Brzezinski in particular, did not feel committed to this special Ford-Schmidt deal.

One week after the October speech of Chancellor Schmidt, U.S. Defense Secretary Brown and Secretary of State Vance argued that in view of additional Poseidon warheads on submarines and the numerical doubling of the F-111s which had been assigned to NATO in the second half of the seventies<sup>88</sup>, no additional sea- or air-launched cruise missiles were required. Still, in December 1977, at the annual meeting of NATO's ministers, Secretary of Defense Harold Brown sought to reassure the Allies that SALT II would not curtail any NATO options, informing them that the Soviet Union had now agreed that the three-year protocol would not limit the testing of cruise missiles up to 2,500 kms, and that in any case the deployment could not be started before the expiration of the protocol. Thus the Germans achieved at least a partial success over the cruise missile question.

### 5.3.5. Schmidt's strategic doctrine

In order to give a more detailed background for the interpretation of Schmidt's 1977 October speech, the opportunity will be taken to analyse Schmidt's strategic doctrine. Since Schmidt, both before coming into office in 1969 and after leaving office in 1982, campaigned for a no first-use policy, his doctrine can certainly not be lumped together with the doctrine of German strategic analysts who called for LRTNF.

Schmidt revealed great reluctance to resort to nuclear weapons very early in any conflict on the Central Front.<sup>89</sup> His well-known 1961 book "Defense and retaliation" which is regarded as a plea for the introduction of flexible response

---

<sup>88</sup> Gert Krell / Hans-Joachim Schmidt, Der Rüstungswettlauf in Europa. Mittelstreckensysteme, konventionelle Waffen, Rüstungskontrolle. Frankfurt: Campus, 1982, p.19. The exact dates of the decision and deployment in respect of additional Poseidon warheads and F-111 are difficult to ascertain. The Aviation Week and Space Technology reports of the F-111' additional deployments in August 1, 1977. According to the NYT the assignation of "more" Poseidon missiles was "reviewed" at the NPG meeting in Monterey in 1975, see NYT, June 18, 1975, p.10

<sup>89</sup> Buteux, 1983, op.cit., p.136

and its first presentation to the German public, was published even some months before McNamara's Ann Arbor speech.

A basic feature in Schmidt's individual TNF posture is his doubt whether a limited nuclear war could be controlled. Thus, in 1961 he criticised Kissinger's theory of a "limited war", because it could not guarantee the termination of war at a level below an all-out nuclear war:

"Kissinger demonstrated that it is diplomacy's task to make it clear to the enemy in peacetime that the initiation by the Americans of the use of tactical nuclear weapons would not be tantamount to the initiation of a strategic nuclear war of annihilation calling for retaliatory or pre-emptive action. Even then it was not made clear whether, in the event of war, escalation from tactical nuclear weapons up to thermo-nuclear bombs could be avoided."<sup>90</sup>

However, Kissinger, who in 1957 still advocated the theory of limited war, in 1960 presented a reappraisal of his former ideas and also started to approve a conventional emphasis in strategy.<sup>91</sup> Schmidt seemed to welcome the fact that he now was in agreement with Kissinger<sup>92</sup>. It seems, however, that in his enthusiasm Schmidt overemphasised Kissinger's "complete revision" of his previous argument.<sup>93</sup> In his 1960 book Kissinger gives the impression that his abandonment of the notion of limited war is due to the realistic evaluation that NATO could never agree to fight a war of this kind rather than a result of his drawing into doubt the notion itself: "While it is feasible to design a theoretical model for limited nuclear war, the fact remains that fifteen years after the beginning of the nuclear age no such model has ever won agreement."<sup>94</sup> His hope that the defence establishment's unwillingness will decrease is suggested implicitly.

Schmidt's credo was that any use of nuclear weapons would automatically lead to the decimation of Europe's civilian population and that of Germany in

---

<sup>90</sup> Schmidt, 1962, *op.cit.*, p.94

<sup>91</sup> Henry A. Kissinger, The Necessity for Choice. Prospects of American Foreign Policy. (New York: Harper and Brothers, 1960)

<sup>92</sup> Helmut Schmidt, "Eine neue Strategie der USA" in: SPD-Pressedienst, (P/XVI/51, March 2, 1961) mentioned in Wilker, 1977, *op.cit.*, p.291

<sup>93</sup> "Strategische Umrüstung in USA. Helmut Schmidt über die neue Verteidigungspolitik der Vereinigten Staaten", Hamburger Echo, March 3, 1961

<sup>94</sup> Kissinger, 1960, *op.cit.*, p.81

particular. Quite starkly, he completed his argument by pointing out that "the peoples of Europe would not care whether it was tactical nuclear weapons or strategic missiles that brought about their extermination."<sup>95</sup>

He pleaded that NATO should be able to fight exclusively with conventional means and he envisaged NATO's employment of nuclear weapons exclusively as a response to the WP's use of nuclear weapons<sup>96</sup>. Thus, his statement implies a renunciation of the first use of nuclear weapons.

In accordance with Schmidt's view, the White Paper 1970 expresses such scepticism in employment of tactical nuclear weapons. This demonstrates that, at least over this decade of participation in the strategic debate, Helmut Schmidt did not change his basic views on NATO's strategy:

"In Mitteleuropa wäre jedoch eine ausgedehnte taktisch-nukleare Kriegführung gleichermaßen vernichtend wie ein strategisch-nuklearer Konflikt."<sup>97</sup>

Accordingly, Schmidt also changed Defence Minister Schröder's preference for a very low threshold: the 1970 White Paper representing the doctrines of the new Socialist-Liberal coalition, stressed Schmidt's preference for a high nuclear threshold and a strong conventional element in defence policy. The 1970 White Paper put forward the demand that tactical nuclear weapons "must not be used except as a last resort and even then only with restraint and on a selective

---

<sup>95</sup> Schmidt, 1962, op.cit., p.103

<sup>96</sup> ibid, p.184

<sup>97</sup> "In central Europe, however, a large-scale tactical nuclear war would have the same devastating effects as a strategic nuclear conflict." Bundesminister der Verteidigung, Weißbuch 1970. Zur Sicherheit der Bundesrepublik Deutschland und zur Lage der Bundeswehr, Bonn: Presse- und Informationsamt der Bundesregierung, 1970), p.27. See also Bundesminister der Verteidigung, Weißbuch 1971/72. Zur Sicherheit der Bundesrepublik Deutschland und zur Entwicklung der Bundeswehr, (Bonn: Presse- und Informationsamt der Bundesregierung, 1971), p.18. The first White Paper, presented in 1969, was prepared under Schröder's tenure in the Defence Ministry, the next two were prepared on Schmidt's orders by the newly created Planungsstab, first chaired by Theo Sommer and later by Hans Georg Wieck, see Kelleher, 1975, op.cit., p.364

basis."<sup>98</sup> . The White Paper demanded strong conventional forces which should function as a "pause" for negotiations:

"Es kommt dabei entscheidend darauf an, daß in Westeuropa konventionelle Streitkräfte in einem Umfang aufrecht erhalten werden, die der NATO die Möglichkeit belassen, auf alles außer einen vorsätzlichen Großangriff anders als nuklear zu reagieren: und die, wenn ein Angriff dieses Maßstabes erfolgen sollte, Zeit lassen für Verhandlungen über eine Beendigung des Konflikts und für Konsultationen unter den Verbündeten über den Ersteinsatz von Kernwaffen, falls die Verhandlungen fehlschlagen sollten."<sup>99</sup>

Thus, the 1970 White Paper does not reject the principle of first use (and certainly could not afford to do so since this was an essential factor in NATO strategy), but advocates that it should be considered at a very late stage of war. According to his scepticism towards deliberate escalation, Helmut Schmidt had always supported the view that "each partner should be granted the right to veto those nuclear attacks which would be initiated from his national territory or would be executed on his national territory."<sup>100</sup>

Schmidt proclaims the following principles for NATO's strategy:

1. build-up of conventional weapons;
2. deemphasis of nuclear weapons which are shaped to execute an early first use;<sup>101</sup>

---

<sup>98</sup> "Als Mittel der Verteidigung können sie wegen ihrer eskalierenden und zerstörerischen Wirkung jedoch nur im äußersten Falle eingesetzt werden und auch dann jeweils restriktiv und selektiv." Weißbuch 1970, 1970, *op.cit.*, p.40; emphasis by S.P. For a further statement against "an isolated tactical nuclear employment" because of its doubtful value as a military means and for deterrence, see Armin Graf von Rothenburg, "Der nukleare Aspekt in der Militärpolitik der NATO", in *Wehrkunde* (Vol.21, No.5, May 1972) pp.225-230, here p.228.

<sup>99</sup> "It is of crucial importance to maintain conventional forces of a scale in Europe which enable NATO to counter any attack - except a deliberate large-scale attack - in other ways than by nuclear means and which - in case such an attack should occur - would leave time for negotiations concerning a termination of the conflict and for consultations among the allies about the first use of nuclear weapons, if negotiations were to fail." Weißbuch 1970, *op.cit.*, p.40

<sup>100</sup> "... jedem Partner ein Vetorecht gegenüber solchen nuklearen Einsätzen einzuräumen, die von seinem nationalen Territorium aus gestartet oder gegen Ziele auf seinem nationalen Territorium geführt werden sollen", Schmidt, 1965, *op.cit.*, p.624

<sup>101</sup> "For no other reason than to make them credible to the potential aggressor, the military forces posing the threat and the plans governing their use must, as far as possible, be shaped so as to rule out the inevitability of escalation to nuclear war,

3. identity of military means and strategic plans for their use with the military means and strategy that will actually be used in the event of hostilities;
4. a defence structure and strategy which does not provoke the potential enemy to preventive aggression;<sup>102</sup> and
5. NATO as a whole should be put in a position from where it can create an equilibrium at all levels of possible warfare.<sup>103</sup>

Thus, it is striking that two essential principles of Schmidt's strategic beliefs are inconsistent with the effects and strategic implications of the deployment of Pershing II and cruise missiles on European soil: first, the deemphasis of weapons which provoke first use and secondly, a defence structure and strategy which does not provoke the enemy into a preventive strike. Only the fifth principle of the necessity of balance at all levels of war-fighting options can be interpreted as a strategic concept which would require these kinds of weapons. Schmidt interpreted this concept of balance also according to its qualitative aspects and thus requested a balance of options. His apprehensions might have referred rather to the assumed Soviet capability of political blackmailing, through the SS-20, than to the problem of numerical imbalance.<sup>104</sup>

It is possible that Schmidt told the truth when he stated in several interviews that he was not overly involved in the decision before 1979. He claims that he had not been interested in the cruise missile and that he did not know anything about the existence of the main NATO organ which dealt with the deployment decision, let alone its details.<sup>105</sup> Thus the former Chancellor, according to the

---

and so to expose all that constitutes European civilisation to the smallest possible risk of destruction." Schmidt, 1962, op.cit., p.183

<sup>102</sup> Schmidt, 1962, op.cit., p.182/183

<sup>103</sup> Schmidt, 1962, op.cit., p.200

<sup>104</sup> Rede Helmut Schmidts vor der Sozialdemokratischen Bundestagsfraktion, February 6, 1979, p.11. See also Risse-Kappen, 1988, op.cit., p.24

<sup>105</sup> Summary of an interview of Helmut Schmidt with Thomas Risse-Kappen, June 11, 1985, unpublished manuscript, made available to me by Thomas Risse-Kappen. The NATO organ which was mainly involved with preparing the LRTNF decision was the High Level Group, see next chapter. For confirmation of Schmidt's statements see also Hoffmann's summary of an interview with Schmidt: "Helmut Schmidt sagte, er habe die Beratungen der HLG, so ihre Empfehlung vom April 1978, die LRTNF evolutionär anzupassen, nicht zur Kenntnis genommen. Er habe die Arbeit dieser Gruppe nicht bemerkt. Sie sei nicht in sein Bewußtsein getreten. Es sei möglich gewesen, daß der Verteidigungsminister irgendwann einmal darüber



information supplied by him, was detached from any military considerations and was only concerned with arms control. Also, in this context we have to consider that Helmut Schmidt was Minister of Defence only from October 1969 until July 1972. Afterwards he obtained the Office of Minister of Finance until May 1974, then he became Chancellor of the Federal Republic. Thus, he was occupied explicitly with strategic matters only for 21 months. It seems that during his chancellorship Schmidt was preoccupied with more important issues such as economic questions and terrorism.

Still, the interpretation that- although he is such a "brilliant strategic thinker"- he did not realise that his military advisers and experts aimed at finding military means to secure the execution of first use is not absolutely convincing, either. His reputation in public is that of an "omnipotent" politician who was able to deal with several crucial issues at the same time. However, this might be the wrong approach to interpret him.<sup>106</sup>

In 1983, after his resignation as Chancellor, Schmidt started to campaign for the abandonment of NATO's sacrosanct strategic principle of first use<sup>107</sup>. During the INF negotiations he strongly supported the zero agreement.<sup>108</sup> Thus it is significant that Schmidt, before his tenure as Federal Defence Minister and Chancellor, campaigned for a no-first use policy, as well as after he left office.

---

Bericht erstattet hätte. Es gebe, so Schmidt, in der NATO immer mehrere Ausschüsse, die sich mit strategischen und Detailfragen beschäftigen." ("Helmut Schmidt said he did not take notice of the HLG's meetings and so had not been aware of its recommendation in April 1978 to adjust the LRTNF in an evolutionary manner. He did not notice the work of this group. He had been conscious of its existence. It could have been possible that the Minister of Defence at some point had reported about this. According to Schmidt, there are always several committees in NATO dealing with strategic issues and questions of detail.") Hoffmann, 1986, *op.cit.*, p.447

<sup>106</sup> See also Risse-Kappen's interpretation of Schmidt which stresses Schmidt's arms control motives. He identifies three misjudgements on the part of Helmut Schmidt: 1. by criticising Carter's SALT policy he "unwittingly" supported people on both sides of the Atlantic who were concerned with halting the SALT process itself. 2. His speech was interpreted as a call for the build up of Western INF. 3. He underestimated the domestic problems and his party's resistance towards these weapons. Thus "his own scope for action was considerably limited". Risse-Kappen regards Schmidt's attempts to deploy the weapons on surface ships as another proof for the fact that "'coupling' in the sense of visible deployment of American INF was not the main consideration for him." Risse-Kappen, 1988, *op.cit.*, pp.20-25, here p.25

<sup>107</sup> see for example Die Welt, October 4, 1983

<sup>108</sup> see for example La Repubblica, June 7/8, 1987, p.5

During his term of office, however, he supported the campaign to install weapons involving the implementation of first use. This phenomenon might be explained by applying Max Weber's categories of "Verantwortungsethik" and "Gesinnungsethik"<sup>109</sup>, meaning that Schmidt acted in contrast to his conviction during his tenure when he had to bear the consequences for his acting.<sup>110</sup>

Two months before NATO ministers agreed on the NATO-Dual Track decision, he made one very explicit statement concerning his preference for land-deployed LRTNF:

"There were Western medium range ballistic missiles and intra-range weaponry in the late 1950s, but they were dismantled by 1963 which I think from hindsight was a wrong step. They should have been modernised rather than dismantled."<sup>111</sup>

---

<sup>109</sup> Max Weber, a German sociologist (1864-1920), started from the premise that all ethics-oriented action can be directed by two divergent, incompatible and opposed maxims: action can be oriented either "gesinnungsethisch" (mind-ethically) or "verantwortungsethisch" (responsible-ethically). This is a unfathomable opposition between whether someone acts according to the maxim - expressed in religious terms: "A Christian acts righteously and the outcome is left to God" (mind-ethical) or whether someone acts according to the maxim that he has to bear the consequences of his action (responsible-ethical). Max Weber, Soziologie. Universalgeschichtliche Analysen. Politik. (Stuttgart: Kröner, 1973) p.174-175

<sup>110</sup> Schmidt's strategic doctrine has also been influenced by the following political considerations: During the early sixties Schmidt had a very close relationship with U.S. politicians and strategic analysts. Accordingly, his strategic doctrine was close to the U.S. interpretation of nuclear deterrence. His close relations with the United States, however, declined in the end of the seventies as a reaction on his part to the unsuccessful arms control policy of the U.S. presidents Carter and Reagan. In his farewell address from parliament in January 1987 he expressed his disappointment that "there has been no disarmament agreement between the superpowers since 1973" and strongly rejected Reagan's SDI plans. The German-U.S. relation he describes as follows: "The Federal Republic must be a friend and partner of the United States, but not a client. If you give the impression that you accept the status of a dependent protege, you must not be surprised if that is the way you are being treated". In this context it is more than consistent that he advocates closer relations with France if an independent Europe is to take shape. He even expresses his regret that during the early sixties he rejected the opportunity for closer cooperation with France: "General de Gaulle was right on an important point. I see more clearly today than I did in 1963, when the Elysee treaty was signed, how much de Gaulle counted on the entente between France and Germany to provide the core for European self-assertion, and obviously he was thinking of France and of himself as the leading partner. At the time, we did not understand or accept this. I admit my own misjudgement; we watered down the preamble to the treaty and wound up on a sidetrack." Statements of Helmut Schmidt, excerpted and translated by the International Herald Tribune, September 5, 1986

<sup>111</sup> Interview with Helmut Schmidt, "Schmidt's calculabilities", Economist, (October 6, 1979) p.49

But it is possible that he intended to justify this dramatic NATO decision two months before it was publicly announced.

While German politicians fought to preserve the option of long-range theatre nuclear weapons during the consultations on SALT I and SALT II, their delegates in NATO fought for the implementation of the option by pressing for a concrete decision to deploy LRTNF.

## **6. The Evolution of the Transatlantic Consensus**

The reluctance of the U.S. administration to yield to the German requests to deploy LRTNF in Europe decreased in the course of the years 1977 and 1978. This shift in the U.S. administration's line concerning TNF policy is the final result of several factors. First of all, the deputies of NATO's defence and foreign ministers, who continued the Nuclear Planning Group's work of revising and planning the modernisation of the TNF in the "High Level Group", pressed for modernisation of the longer-range TNF and campaigned for a quick deployment decision. A lack of U.S.-German cooperation concerning the neutron bomb issue was interpreted by public opinion as a further indication of the weakness of the Carter administration. As a result, the issue of TNF was seized on by Carter mainly in order to demonstrate his capability to lead NATO and to steer a controversial hardware decision. In the final shaping of the NATO Dual-Track decision German positions prevailed on the two crucial political issues: the distribution of the weapons' deployment among five NATO allies and the simultaneous arms control offer to the Soviet Union, i.e. the second track of the NATO Dual-Track decision. In this context it shall also be demonstrated that the final land deployment of the LRTNF was compatible with German doctrines. Emphasis will put on the fact that Helmut Schmidt's attempt to deploy the missiles at sea was aimed mainly at increasing the number of participating nations and not at preventing the Federal Republic from being turned into a target area for Soviet missiles. We will see that it was not the United States - as commonly assumed - that torpedoed Schmidt's proposal, but his European allies.

### **6.1. The Shifting Policy of the U.S. administration**

#### **6.1.1. The Establishment of the High Level Group**

Another attempt by the U.S. administration to induce the West Europeans to take on their share of the common burden in NATO was the Long-Term-Defense Program (LTDP), presented at a summit of NATO leaders in May 1977 and ratified in May 1978. The LTDP not only incorporated the aim of a three percent annual increase in military expenditure, but also provided the

framework for a substantial programme of improvements in a number of concrete areas, including conventional forces, reinforcement capabilities and theatre nuclear weapons.<sup>1</sup> As part of the LTDP a number of task forces were established, including one to examine theatre nuclear weapons (Task Force 10).<sup>2</sup>

The United States' intention in establishing the LTDP was clearly to strengthen the conventional component in NATO's forces. The Europeans perceived it mostly as a move to pressurise them to share the burden and to increase their defence budgets. Since the LTDP was focused mainly on conventional arms and reinforcement of conventional forces, Task Force 10 had been established as a precautionary measure against European apprehensions that the new Carter administration intended to abandon nuclear deterrence:

"Die Arbeitsgruppe 10, die sich mit einer Überprüfung der taktischen Nuklearwaffen befassen sollte ...war eingesetzt worden, um Befürchtungen der Europäer entgegenzuwirken, die USA beabsichtigten eine 'Entkopplung' der konventionellen von der nuklearen Dimension."<sup>3</sup>

Thus the establishment of Task Force 10 resulted from European apprehensions that the United States might "denuclearise" NATO strategy.

For the same reason U.S. Defense Secretary Brown proposed to underscore the work of Task Force 10 by converting it into a "High Level Group", at an October 1977 meeting of the NPG in Bari.<sup>4</sup> This meant that the representatives of the group would be recruited from high-ranking deputies of the national defence ministers rather than from members of the NATO staff in Brussels. They were drawn from their countries' defence and foreign ministries with ready access to their ministers and so were authorised to present their governments'

<sup>1</sup> see Garthoff, 1983, *op.cit.*, p.198; see also Communique of the North Atlantic Council, May 10-11, Communique of the DPC, May 17-18, 1977 and also its annex "Ministerial Guidance -1977" in Communiques, 1977, *op.cit.*, p.12-20

<sup>2</sup> see Haftendorn, 1985, *op.cit.*, p.262 and Garthoff, 1983, *op.cit.*, p.198

<sup>3</sup> "Task Force 10, which was set up to review the theatre nuclear weapons, was established in order to counter European apprehensions that the United States intended a 'decoupling' of the conventional from the nuclear dimension." Haftendorn, 1985, *op.cit.*, p.262

<sup>4</sup> Elliot points out that this decision in Bari to set up a High Level Group was made precisely 3 days after Schmidt's dramatic October 1977 speech. David C. Elliot, Decision at Brussels: The Politics of Nuclear Forces (Santa Monica: California Seminar on International Security and Foreign Policy, Discussion Paper No. 97, August 1981), p.7

viewpoints.<sup>5</sup> Although the NPG had already established expert groups with national representatives, the formation of this group with national department heads was unique. The group was chaired by the Assistant Secretary of Defense for International Security Affairs, David E. McGiffert. The Federal Republic was represented by the head of the department of military policy of the operations staff, Maj.Gen. Peter Tandecki.<sup>6</sup>

Between 1977 and 1979 the HLG was due to examine the need for NATO to undertake long-range TNF modernisation and the technical, military and political implications of "alternative NATO TNF postures."<sup>7</sup> Before the establishment of the HLG, the West German and the British delegation already had very clear-cut ideas. According to Lothar Rühl, in the Nuclear Planning Group Defence Minister Leber had taken initiatives concerning land-deployed intermediate-range modern missiles with a capability to attack the Soviet Union. Thus, the LRTNF deployment decision was pre-shaped in the Nuclear Planning Group as early as 1976, representing the climax of German influence within the NPG.<sup>8</sup> The British ally had also anticipated the HLG's recommendation. In August 1977, while replying to a query from U.S. Secretary of Defense Brown, the British Defence Minister Fred Mulley had argued in a closely guarded letter in favour of replacing the aging and vulnerable V-bombers. He argued that for geographical reasons the British would take a special interest in the long-range systems of the theatre nuclear weapons. Another argument was that the British intended to support the Federal Republic by their stance on the long-range cruise missile.<sup>9</sup>

---

<sup>5</sup> See John Barry, "Revealed: The Truth about Labour and Cruise" in The Sunday Times, February 6, 1983, p.17 and Haftendorn, 1985, op.cit., p.262

<sup>6</sup> Tandecki's title in German: Leiter der Abteilung Militärpolitik im Führungsstab Streitkräfte, Brigadegeneral. Haftendorn, 1985, op.cit., p.262

<sup>7</sup> Garthoff, 1983, op.cit., p.198

<sup>8</sup> Rühl, 1987, op.cit., p.167. Hoffmann, 1986, op.cit., p.416

<sup>9</sup> See Elliot, 1981, op.cit., p.6. Barry picked up these events in his article. The article which aims at revealing Labour's responsibility for the LRTNF decision even called Mulley the "progenitor" of the LRTNF decision, both in political and intellectual terms. He also confirmed the Germans' active role in the decision to deploy LRTNF in Europe: "Intellectually, because the letter laid out the doctrine which NATO as a whole later endorsed. Politically, because Britain was then a 'swing vote' on the issue. The Germans had argued in NATO all through 1976 for a Europe based counter to the SS-20. The Americans, by contrast, believed that the nuclear umbrella of the Poseidons assigned to NATO remained a sufficient

### 6.1.2. Transatlantic alliance of the Defence Secretaries' deputies

The HLG first met in November 1977; it consisted of representatives from 11 member states.<sup>10</sup> Its starting point was the TNF study by U.S. Defense Secretary Donald Rumsfeld, which he had presented to the NPG in 1976.<sup>11</sup> At the third meeting in Los Alamos, New Mexico, in February 1978, a consensus developed among the Alliance representatives "that a new NATO weapons deployment was needed."<sup>12</sup> The reasons for this consensus are perceived very differently by the various authors who analysed this crucial period.

Haftendorn identifies Michael Quinlan, the British Deputy Secretary responsible for policy in the British Ministry of Defence, in his handling of nuclear affairs as the most active and pushing person on the issues in hand. This view is confirmed by John Barry, in whose opinion the British team of Quinlan and Wilberforce<sup>13</sup> "played a key role in overcoming American efforts to block it"<sup>14</sup>, i.e. to block the British initiative in favour of the missiles. James A. Thomson, who himself joined the HLG in spring 1978 as a representative of the National Security Council, describes British and West German officials as pushing hard "for the adoption of a consensus that there should be an 'evolutionary upward adjustment' in the long-range portion of NATO's theatre nuclear forces."<sup>15</sup> Fred Kaplan, who interprets the evolution of the High Level Group's "consensus" as revealing a prevalence of U.S. defence plans, explains the European compliance with U.S. dominance in terms of the activism exhibited by the Norwegian delegate Johan Holst. Until his appointment as Norway's Under Secretary of State for Defence in 1976, Holst had been a

---

deterrent. Now Mulley was placing Britain alongside Germany, the political balance within NATO tilted towards new weaponry." Barry, 1983, op.cit., p.17

<sup>10</sup> United States, Great Britain, Italy, the Federal Republic, the Netherlands, Norway, Canada, Turkey, Belgium, Denmark, Greece, see U.S. House of Representatives Report, Modernization, 1980, op.cit., p.19

<sup>11</sup> see Haftendorn, 1985, op.cit., p.262

<sup>12</sup> see Garthoff, 1983, op.cit., p.202

<sup>13</sup> John Wilberforce was Head of the Defence Department of the Foreign and Commonwealth Office and Michael Quinlan was Deputy Secretary of the Ministry of Defence, handling nuclear affairs, see Barry, 1983, op.cit., p.17

<sup>14</sup> emphasis in the text, ibid, John Barry reports that Quinlan drafted Mulley's famous letter for Brown in August 1977

<sup>15</sup> Thomson, 1984, op.cit., p.605

prominent member of the Euro-American workshop, a transatlantic group of academics who campaigned for the cruise missile. Even while in government, he attended the HLG's meetings strongly aiding McGiffert's campaign. According to Kaplan "(h)is aggressive presence helped assure some doubtful delegates that the plan wasn't something imposed on them against their interests by domineering Americans."<sup>16</sup>

David McGiffert represented the Pentagon's position<sup>17</sup>, which in 1975-76 started to show interest in the ground- and sea- launched cruise missile.<sup>18</sup> Thus, McGiffert did not need to be persuaded by the Europeans and also pushed the idea of cruise missile deployment. In February 1978, already at the third meeting of the HLG, McGiffert presented a detailed proposal for the procedure of the "evolutionary upward adjustment". Most staff work was done in advance of meetings in Washington, with the "U.S. representatives providing most of the data on possible weapon systems for NATO deployment."<sup>19</sup>

McGiffert's proposal at the HLG's second meeting consisted of four alternative ways to deal with LRTNF modernisation:

- to do nothing;
- to develop a serious battlefield nuclear capability for the theatre without the capability to strike targets in the Soviet Union;
- to make modest improvements in long-range theatre nuclear weapons;
- to develop a theatre capability which would allow to wage a counterforce strategic nuclear war against the Soviet Union.<sup>20</sup>

At the third meeting in February 1978 the HLG discussed McGiffert's proposal. David Schwartz's description of this discussion suggests that these options had

---

<sup>16</sup> see Kaplan, 1979, *op.cit.*, p.84

<sup>17</sup> McGiffert was U.S. Assistant Secretary of Defense for International Security Affairs

<sup>18</sup> Thomson, 1984, *op.cit.*, p.602

<sup>19</sup> Garthoff, 1983, *op.cit.*, p.202. See also Kaplan, who contends that the American position was pushed through "virtually untouched"; Kaplan, 1979, *op.cit.*, pp.55-57; and see U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, pp.19-20

<sup>20</sup> see Schwartz, 1983, *op.cit.*, p.218



been weighed against each other with strong and coherent military arguments and with only one possible result:

"The first option was dismissed because of the perceived political need to respond to SS-20 deployments and to make sure that SALT II would not constrain the European cruise missile option. The second was dropped because of European reluctance to adopt a serious nuclear battlefield capability, with its terrible consequences for European societies, and because of general agreement that new weapons should be able to strike the Soviet Union... The fourth option was dismissed out of hand, because its creation could imply the decoupling of American central strategic forces from the defense of Europe. This left the third option, which was attractive for several reasons: -- It would not raise the specter of decoupling. -- At the same time it would be a visible response to Soviet SS-20 deployments. -- It was the least provocative of the three action options and hence most acceptable to the elites in domestic settings that favored the pursuit of detente."<sup>21</sup>

So by March 1978 McGiffert had led the group to the consensus that LRTNF modernisation was necessary and that it would include the possibility of hitting targets in the Soviet Union. Moreover, the consensus implied that the modernisation should be an "evolutionary upward adjustment"<sup>22</sup> along the following guidelines:

- a radical change in NATO's defence posture should be avoided;
- it was not considered necessary to match the capability of the SS-20 directly, but merely to provide a credible response by an offsetting capability;
- to ease the public mind concerning the credibility of response, visibility of the systems was demanded; this means the weapons had to be deployed on land;
- because of their land-based deployment the systems were vulnerable; thus they had at least to be very mobile in order to be able to escape Soviet strikes;
- high accuracy and penetrability, survivability and thus mobility was demanded;
- a mix of weapons was recommended in order to compensate for the vulnerability of land-based systems.<sup>23</sup>

---

<sup>21</sup> ibid.

<sup>22</sup> ibid., p.219

<sup>23</sup> see U.S. House of Representatives Report, Modernization, 1980, op.cit., p.20

During this period West-German officials began to present their *sine qua non* for an agreement on LRTNF modernisation which contained the following points:

- no participation of the Federal Republic in the decision on production of nuclear weapons;
- integration of these weapons into arms control after a production decision;
- no special role for the Federal Republic. The deployment of the weapons would only be agreed to if the Alliance reached a common decision on their introduction, i.e. if deployment was not to be undertaken solely on German territory.<sup>24</sup>

An other important German guideline was the objection to deploy the LRTNF under a dual-key or POC system.<sup>25</sup> David Schwartz reports that the Germans maintained this position throughout the talks, much to the surprise of those who feared that demands for control sharing would inevitably follow from the LRTNF modernisation and would create another kind of dilemma for the Alliance like that of the Multilateral Forces at the beginning of the sixties.<sup>26</sup> Speculation might be allowed here that the U.S. reluctance to yield to the German deployment requests was partly due to U.S. apprehensions that the Germans were seeking to achieve more control over the release of nuclear weapons by means of the LRTNF deployment.

According to Haftendorn four aspects played a role for the Germans' refusal to deploy the weapons under a POC system:

- the role of the Federal Republic as a non-nuclear state;
- the self-limitation on the use of the fuel cycle for civilian purposes into which Bonn was pushed by the U.S. proviso;

---

<sup>24</sup> These guidelines had been outlined already for the deployment of the neutron bomb. See Haftendorn, 1985, *op.cit.*, p.264

<sup>25</sup> See Haftendorn, 1985, *op.cit.*, p.156.

<sup>26</sup> see Schwartz, 1983, *op.cit.*, p.219. Lothar Rühl points out that one essential guideline of the German TNF policy within the Nuclear Planning Group in 1976 was "the participation of all non-nuclear NATO members in the possession of nuclear delivery systems." ("Teilnahme der nicht mit eigenen Nuklearwaffen gerüsteten NATO-Partner am Besitz von TNF-Trägermitteln.") However, in this context Rühl describes the general drafting of the German TNF guidelines and does not refer especially to LRTNF. Rühl, 1987, *op.cit.*, p.159

- constraints on the German Ostpolitik which would arise from the Soviet Union's probable reaction to a situation in which the Germans could trigger the release of weapons reaching the Soviet Union;
- higher costs to be paid by the Federal Republic in case it owned these weapons.<sup>27</sup>

Officials of the Defense Department agreed on the HLG's consensus, but this was apparently the point where the National Security Council and the State Department felt that the Defense Department had gone too far. Carter and the State Department were not willing to jeopardise the ongoing SALT negotiations by a NATO decision to deploy long-range cruise missile or any other kind of long-range nuclear weapon which would be heavily opposed by the Soviet Union. They feared that the Defense Department, represented by McGiffert, had gone too far and could have committed the U.S. to an untenable position in the absence of an unanimous policy on cruise missiles.<sup>28</sup>

Therefore, the National Security Council (NSC) dispatched its own representative, James Thomson, to the HLG. According to Thomson, the NSC staff were directed to "water down" the consensus. But another transatlantic irritation changed the U.S. administrations' reluctant attitude towards the LRTNF.

### 6.1.3. The Neutron bomb debacle

The neutron bomb (or enhanced radiation weapon, ERW) had been discussed in NATO circles since the beginning of the seventies.<sup>29</sup> But no official U.S. decision to apply the technology to battlefield weapons was taken until November 1976, when President Ford reportedly approved development of

---

<sup>27</sup> see Haftendorn, 1985, *op.cit.*, p.265

<sup>28</sup> Garthoff, 1983, *op.cit.*, p.202. Thomson, 1984, *op.cit.*, p.605

<sup>29</sup> see Hoffmann, 1986, *op.cit.*, p.161; Risse-Kappen, 1985, *op.cit.*, p.13. For an overview see Wolf Richter, Neutronenwaffe - "Perversion des Denkens?" Zur Kontroverse um atomare Gefechtsfeldwaffen in Europa und ihre Bedeutung für die NATO-Strategie, (München: Bernard und Graefe, 1982) and Volker Mathee, Die Neutronenwaffe zwischen Bündnis und Innenpolitik. Eine Studie über die Verknüpfung nationaler und allianzinterner Willensbildungsprozesse, (Herford und Bonn: Mittler, 1985)

enhanced radiation weapons.<sup>30</sup> The subject became controversial in June 1977, when Walter Pincus of the Washington Post publicised the Carter administration's apparent decision to go ahead with ERW production.<sup>31</sup> These weapons are designed to produce far more radiation, far less blast and heat than other tactical nuclear weapons, so that they kill attacking soldiers without severe damage to their surroundings.<sup>32</sup> The public discussion in the Federal Republic was initiated by an article by Egon Bahr, then Party Secretary of the Social Democratic Party, which he titled, "Is mankind going mad?"<sup>33</sup> He considered a weapon that discriminates between living creatures and property as a "sign of perverse thinking".<sup>34</sup>

The opposition against the neutron bomb within the SPD intensified in November 1977 and Schmidt, himself in favour of the neutron bomb<sup>35</sup>, had his hands full to keep the left wing of his own party from openly opposing deployment.<sup>36</sup> Whether Helmut Schmidt was in favour of the neutron bomb in

---

<sup>30</sup> Walter Pincus in Washington Post, August 16, 1977, p.A6

<sup>31</sup> Walter Pincus "Neutron Bomber Warhead Buried in ERDA Budget", in Washington Post, June 6, 1977, p.1

<sup>32</sup> Leslie H. Gelb, "Reagan orders production of 2 types of neutron arms for stockpiling in the U.S." see NYT, August 9, 1981, p.1. For a discussion of the details of the of the neutron weapon's military characteristics see chapter 4.2.2

<sup>33</sup> Egon Bahr "Ist die Menschheit dabei, verrückt zu werden?" in Vorwärts, Nr.29, July 21, 1977, p.4

<sup>34</sup> ibid

<sup>35</sup> The reasons for Schmidt's support of the neutron bomb are not clear. See for example Theo Sommer, who worked in the Ministry of Defence under Helmut Schmidt and who advocates for the neutron bomb because of its quality as a bargaining chip. See Theo Sommer, "The Neutron Bomb: Nuclear War without Tears?" in Survival, (Vol. 19, No.6, Nov./Dec. 1977) pp.263-266, here p.266

<sup>36</sup> The opposition to the deployment of neutron bombs grew stronger within the SPD during the preparations for the November 1977 party congress. The party executive planned to take a resolution which would allow the government to decide on this issue without restrictions. However, the SPD's left wing tabled a resolution calling for the prohibition of any deployment of ERW on German soil. Thereupon the party executive changed the text of its own resolution considerably and asked the government to create political and strategic prerequisites within the framework of security and disarmament so that storing the neutron weapon on the territory of the Federal Republic would be rendered unnecessary. Parteitag der Sozialdemokratischen Partei Deutschlands, 15. bis 19. November 1977, Protokoll der Verhandlungen. Anlagen. The CDU/CSU Bundestag group voted in February 1978 to support the production of ERW and their deployment in Europe, see FBIS Western Europe, February 22, 1978

order to use it as a bargaining chip in future arms control negotiations or for military reasons cannot be clarified.

In September 1977, the German government had produced a positive assessment of the neutron bomb, although without taking a decision on a possible deployment on German territory.<sup>37</sup>

But the Carter administration did not want the full and sole responsibility for deploying the neutron bomb in Europe. It hoped that, in particular, the West German government would share that onus. In effect, Washington wanted the Bonn government to ask the United States to proceed with the bomb or at least to commit itself in advance to accepting its deployment on German territory.<sup>38</sup>

After internal disputes in the German government between the Ministry of Foreign Affairs and the Defence Ministry, the Federal Security Council<sup>39</sup> took a decision on the neutron bomb issue on January 20, 1978.<sup>40</sup> The German government's position on the neutron bomb was, as mentioned above, identical with its policy line on the TNF:

- non-participation in production decision;
- incorporation of the neutron bomb in arms negotiations;
- readiness to deploy if arms control does not obviate deployment;

---

<sup>37</sup> see Georg Leber's speech in the Bundestag, September 8, 1977, PlPr 8/39, p.3006-3012, here p.3011; see also answer by the Parliamentary Undersecretary of State von Bülow, September 20, 1977 to the question by the MP Mertes, German Bundestag, Drucksache 8/1014, October 14, 1977, pp.39-41

<sup>38</sup> Talbott, 1979, op.cit., p.150

<sup>39</sup> The Federal Security Council (Bundessicherheitsrat) is a pure cabinet committee without any organisational basis. It is chaired by the Chancellor or the Minister of Defence. It includes the Ministers for Foreign Affairs, for the Interior, for Defence and for Economy and Finance. The Chief of Staff of the Armed Forces and, from 1978, the Federal Government Commissioner for Disarmament and Arms Control at the Foreign Ministry, Dr. Ruth, later also joined the Federal Security Council. Certain tasks, such as the export of armaments, are delegated to the council and serve as test cases for important decisions on security and defence issues. See Helga Haftendorn, "Das außen- und sicherheitspolitische Entscheidungssystem der Bundesrepublik Deutschland", Aus Politik und Zeitgeschichte. Die Beilage zum Wochenblatt Das Parlament, B43/83, (October 29, 1983), pp.3-15, here p.4 and Haftendorn, 1985, op.cit., p.271

<sup>40</sup> Ruehl, 1979, op.cit., p.147

- non-singularity<sup>41</sup>

On March 14, 1978, the Federal Security Council finally decided in favour of the neutron bomb's deployment on the soil of the German Federal Republic.<sup>42</sup>

Following this decision of the Federal Security Council, West German diplomats were able to work out an agreement with their NATO allies in February and March 1978 on a procedure for handling the U.S. insistence on public European acceptance of the deployment of the neutron bomb prior to a production decision by the United States.

The procedures agreed, first, that the United States had to make its production decision public, and second, on a proviso that deployment would take place only if an appropriate arms control agreement with the Warsaw Pact were not achieved within two years. The NATO allies would then immediately declare their intention to accept deployment on these conditions.<sup>43</sup>

However, President Carter found this procedure politically unacceptable. Misunderstanding over the details of the procedures between him and his diplomats might have contributed to the decision to cancel the ERW production as well as Carter's moral and political sensitivities concerning these weapons that "kill people but leave buildings intact"<sup>44</sup>. In March his Deputy Secretary of State, Warren Christopher, was dispatched to NATO capitals to explain Carter's decision. Schmidt was reportedly so surprised by the news that he asked Christopher to reconfirm the message. Schmidt then advised Christopher that the Federal Republic was in fact prepared to support ERW deployment. Even Foreign Minister Genscher was sent to Washington to change Carter's mind, but he failed. On April 7, 1978, Carter announced a modified decision for modernising certain tactical nuclear systems, including the development of

---

<sup>41</sup> See the governmental declaration of Chancellor Schmidt April 13, 1978, published in Bulletin. Presse- und Informationsamt der Bundesregierung, No.34, April 14, 1978, pp.321-326, here p.324

<sup>42</sup> see Rühl, 1979, op.cit., p.148. The 14th of March is also mentioned in Helmut Kohl's speech in the German Bundestag, on April 13, 1978, PIPr 8/83, pp.6504-6511, here p.6509

<sup>43</sup> see Rühl, 1979, op.cit. (ref. chap.4,41), p.148

<sup>44</sup> Zbigniew Brzezinski, Power and Principle. Memoirs of the National Security Adviser 1977-1981 (London: Weidenfeld and Nicolson, 1983), p.304

ERW components, with his ultimate ERW production decision dependent on Soviet restraint in military programmes.<sup>45</sup>

By withdrawing American support for the neutron bomb Carter precipitated a "political disaster for the alliance, and, ultimately, for himself."<sup>46</sup> The plain fact that a U.S. President withdrew approval for a decision was treated by members of the strategic community as a catastrophe of extensive dimensions. The reaction of those strategists who were close to Schmidt is somewhat comprehensible because Schmidt felt cheated, since he fought hard in his own party for approval of the decision. Lothar Rühl talks about "traumatic effects" and a "dangerous event" for the Alliance.<sup>47</sup> Also K.-Peter Stratmann of the Ebenhausen Institute, otherwise noted for a sober and neutral style, uses the language of psychiatry and speaks of "traumatic controversy" in the context of the neutron bomb.<sup>48</sup>

The effect of this debacle on the evolution of the LRTNF decision and in particular, on U.S. decisiveness over deployment at the beginning of the eighties cannot be overestimated. Whenever in this context the talk is about the necessity of keeping unity and unanimity in the Alliance and of the psychological reasons for the Dual-Track decision, the neutron bomb is the cause.

Thus the neutron bomb debacle is regarded as the issue which also induced the Carter administration to change its policy towards the cruise missile:

"The period of American reluctance and foot-dragging on the cruise missile issue ended with the denouement of the neutron bomb affair in April 1978. Thereafter, a policy process was set in motion inside the US government that sharply shifted the U.S. stance on cruise missiles and more generally on LRTNF."<sup>49</sup>

---

<sup>45</sup> see Carter, 1982, *op.cit.*, p.225-229. Thomson, 1984, *op.cit.*, p.606. Rühl, 1979, *op.cit.*, p.148. Gelb, 1981, *op.cit.*, p.L+30. "Carter von Genscher nicht umgestimmt. Die Neutronenwaffe wird vorerst nicht produziert". *Frankfurter Allgemeine Zeitung*, April 6, 1978. Vance, 1983, *op.cit.*, p.67-69.

<sup>46</sup> Thomson, 1984, *op.cit.*, p.606

<sup>47</sup> Rühl, 1980, *op.cit.*, p.104

<sup>48</sup> Stratmann, 1981, *op.cit.*, p.18

<sup>49</sup> Thomson, 1984, *op.cit.*, p.605. See also Schwartz: "It would be difficult to overstate the effect that Carter's decision had in Europe." *op.cit.*, p.223

After the European reaction to the neutron debacle, the United States was challenged to give proof that its leadership in NATO was still untouchable.

From April 1978, the date of Carter's announcement to defer production of the neutron bomb, the interagency meetings between the National Security Council, the Joint Chiefs of Staff and the Arms Control and Disarmament Agency in the White House changed decisively. The issue assumed a predominantly political character. All members agreed that another political fiasco had to be avoided and that the new policy expressed in the LRTNF plan would succeed. Kaplan comments on the psychological effects of the neutron bomb fiasco:

"The tough questions were dropped because those who had been asking them came to think there might be no answers. Without answers, there might be no deployment. And without deployment, America's 'leadership role' in NATO would decay - and that had to be prevented above all else."<sup>50</sup>

#### **6.1.4. Presidential Review Memorandum 38**

Although the Defense Department pursued modernisation through its leadership in the High Level Group, there was no interagency consensus on this policy. From October 1977 to April 1978 many counter arguments were considered by the State Department and the National Security Council. SALT II had top priority during this period and one of the most important tasks was to convince the allies of the merit of the negotiations. It has to be emphasised again that the shift of the U.S. Department towards deployment was consistent with the arms control policy, because since May 1977 it was clear that the SALT protocol would only exclude deployment of GLCM and SLCM for a period of three years, but not their development and testing. U.S. Defense Secretary Brown had approved their full scale development in February 1977.

After the neutron bomb debacle in April 1978 President Carter issued the Presidential Review Memorandum (PRM 38), coordinated by the National Security Council. PRM 38, "Long Range Theater Nuclear Capabilities and Arms Control", called for a review of pros and cons, options and alternatives in respect of LRTNF deployment. It was an interagency study, with the State Department providing PRM with a historical overview; the Defense

---

<sup>50</sup> Kaplan, 1979, op.cit., p.57



Department, coordinated by McGiffert and the Office of International Security Affairs, giving the military rationale for a LRTNF deployment; and finally, the CIA providing data on the increasing threat of Soviet LRTNF. The Arms Control and Disarmament Agency was asked to examine the effects on arms control and the opportunities for negotiations on the matter. Its paper, completed in August 1978, defined the crucial issue: whether to base new nuclear weapons in West Germany that were designed to put a part of the Soviet Union at risk.<sup>51</sup> The paper also discussed British and French reservations concerning deployments in West Germany, German insistence on non-singularity, and anticipated tension between, on the one hand, the plan for a visible presence of the weapons to reassure Europeans of the U.S. nuclear commitment to their defence, and on the other hand, the greater survivability of sea-based systems.

PRM 38 integrated "the idea of negotiations with the deployment of additional hardware along the lines suggested by the Germans"<sup>52</sup>, and presented a military rationale for this additional hardware along the lines the British had suggested, referring to Mulley's proposal that the missiles should be land-deployed instead of sea-deployed. PRM 38 was a real compromise between the right and the left and offered two options to the U.S. administration: either to support the HLG consensus on "evolutionary upward adjustment" and to determine the hardware that would be involved in such an adjustment, or to seek to sidestep the issue by offering the allies "political solutions" such as assigning more U.S. strategic forces to SACEUR.<sup>53</sup> In the August and September meetings of the Cabinet-level Special Coordinating Committee (SCC), which is the leading Committee of the National Security Council and was then chaired by Zbigniew Brzezinski<sup>54</sup>, the Assistant to the President for National Security Affairs, it was decided to follow the NSC's recommendation of the first option with its hardware solution.<sup>55</sup> This hardware solution was "to be incorporated into an

---

<sup>51</sup> Sigal, 1984, op.cit., p.58

<sup>52</sup> ibid., p.59

<sup>53</sup> Thomson, 1984, op.cit., p.606

<sup>54</sup> The Security Coordinating Committee consists of the President, the Secretary of State, the Secretary of Defense, the Director of the CIA and the Security Adviser of the President.

<sup>55</sup> Garthoff, 1983, op.cit., p.202

'integrated' approach which would anticipate LRTNF deployments and negotiations over LRTNF limits in SALT III."<sup>56</sup>

Shortly after Schmidt's speech the first of several interagency meetings took place in the White House. These meetings were chaired by David Aaron, Brzezinski's deputy at the National Security Council. Other members were Leslie Gelb, David McGiffert, Lieut. Gen. W.Y. Smith of the Joint Chiefs of Staff, Spurgeon Keeny of the Arms Control and Disarmament Agency, and their staffs. Together they constituted what was nicknamed the "mini SCC" because all their bosses were members of the SCC. Except for Gelb, all members of the group considered the cruise missile with a range of 2,500 kms a valuable option. Kaplan reports that Gelb maintained his scepticism about the need for a long-range cruise missile and that he pointed out that this kind of weapons would also be interpreted as an attempt to decouple the U.S. defence from that of NATO. Leslie Gelb hoped that Schmidt would change his mind on realising these potential implications. Schmidt did renounce the need for strict parity in all categories of weapons but he "stood firm on the demand for something in Europe to counter the SS-20."<sup>57</sup> Gelb soon came to accept this fact and supported the new missiles.

#### 6.1.5. The Euro-American Workshop

There was also a group of academics who campaigned for the cruise missile. Chaired by Albert Wohlstetter, the Euro-American workshop consisted of academics, consultants and analysts based at the London Institute for Strategic Studies, the Stiftung Wissenschaft und Politik (SWP) in Ebenhausen (Munich), the Norwegian Institute of International Affairs, the European-American Institute for Security Research in Los Angeles and Stanford University, who had strong connections with a small, influential, trans-atlantic community of official and semi-official defence intellectuals.<sup>58</sup> The "minimal consensus" of

---

<sup>56</sup> Thomson, 1984, *op.cit.*, p.606/607. On July 31, 1978 a bilateral German-American meeting took place in which the Germans again insisted on the integrated approach for a hardware solution and arms control, see Risse-Kappen, 1985, *op.cit.*, p.29

<sup>57</sup> Kaplan, 1979, *op.cit.*, p.57

<sup>58</sup> *ibid.*, p.vii and biographical data of Uwe Nerlich in Uwe Nerlich and Falk Bomsdorf (eds.), Sowjetische Macht und westliche Verhandlungspolitik im Wandel militärischer Kräfteverhältnisse. (Baden-Baden: Nomos-Verlag, 1982) p.626

military strategists from two continents with quite different security interests was that they were interested in the potential offered by cruise missile technology.

Consequently, the cruise missile with its brand-new technology was in the centre of the workshop's attention, and it is logical that its members did not appreciate seeing the cruise missiles' potential options cut by a limitation of their range. The U.S. members of the workshop were Albert Wohlstetter (RAND-Corporation, Stanford University), Henry Rowen (former President of the RAND Corporation) and Richard Burt (then Assistant Director of the IISS, and subsequently U.S. ambassador to the Federal Republic).<sup>59</sup> The Europeans were represented by Johan J. Holst, a researcher at Norway's most prestigious defence research institute and later Norway's Secretary of Defence, Uwe Nerlich from the Ebenhausen Institute, Laurence Martin, Gen. Peter Tandecki, who was German military delegate to NATO's High Level Group and subsequently a General in the Military Committee, Lothar Rühl, and Walther Stützle, then head of the planning staff of the Ministry of Defence (later Director of SIPRI).<sup>60</sup>

Between 1975 and September 1978 the workshop met 9 times and, apart from publications in professional journals, it published three books with the support of the Thyssen Foundation and the Defence Nuclear Agency.<sup>61</sup> The workshop cannot be interpreted as campaigning for the development of long-range theatre nuclear weapons, since U.S. members, like Wohlstetter and Schlesinger, were chiefly interested in non-nuclear missiles.<sup>62</sup> However, the European part can only be conceived as promoting LRTNF for European purposes. The

---

<sup>59</sup> The membership of the workshop cannot be indicated precisely

<sup>60</sup> Kaplan, 1979, *op.cit.*, p.55

<sup>61</sup> While Fred Kaplan gives considerable weight to the influence of the Euro-American workshop on the LRTNF decision, Risse-Kappen accuses him of overestimating the influence. See Risse-Kappen, 1985, *op.cit.*, p.98. Helmut Schmidt confirmed in an interview with Risse-Kappen that the Euro-American workshop did not play an important role.

<sup>62</sup> "These people had seen new technologies developing that could revolutionize NATO defences. Wohlstetter was chiefly interested, as was the then Defense Secretary Schlesinger, in nonnuclear cruise missiles, which, thanks to their long and astonishing accuracy, could destroy targets that only nuclear weapons would have reliably destroyed in the past. Thus, escalation to nuclear war could more easily be avoided." Kaplan, 1979, *op.cit.*, p.55

members of the workshop represented an indispensable link between the politicians and the U.S. armament industry in convincing the politicians of the essential need for newly elaborated military options. The workshop did not directly influence government decisions. Rather, it influenced government decisions through consulting politicians and distributing internal papers ("for personal information only").<sup>63</sup> Accordingly, the workshop defines itself as "part of a systematic and continuous effort at joint assessment of emerging issues before governmental positions are crystallized and hardened".<sup>64</sup> Walther Stützle, during this period director of the German Ministry's planning office and a key adviser to Schmidt having part in writing Schmidt's speeches, "played an active role in discussions at the workshop's conferences."<sup>65</sup>

#### **6.1.6. The HLG's final report**

After the settlement of PRM-38, the SCC directed the Department of Defense to list the military options and proposals. The paper, which the High Level Group received in October 1978, examined five weapon systems:

1. Pershing II: Extended Range which was a new version of the Pershing 1A missile
2. GLCM: The ground-launched cruise missile, to be produced by General Dynamics, would be transported around NATO Europe on board transporter erector launchers, which should carry four missiles. Each launcher would be accompanied by launch-control vehicles, security personnel, and various other support elements. It has a range of 2,500 kms with an accuracy of 80 metres.
3. MRBM: In response to the search for military options for LRTNF deployment, the air force had developed plans for a new medium-range ballistic missile, called "Longbow", with a range of 2,400 kms. Longbow would use technology already developed for Minuteman III. But the production of Longbow was not yet sufficiently advanced for deployment in the eighties.

---

<sup>63</sup> Michael Gumbert and Reimar Stuckenbrock, "Die herrschende Sicherheitspolitik in der Sackgasse: Warum Nuklearrüstung als Politikersatz scheitern muß", in Albrecht et.al. (eds.), 1983, op.cit., pp.10-53, here p.22-26

<sup>64</sup> Holst / Nerlich (eds.), 1977, op.cit., p. vii

<sup>65</sup> Kaplan, 1979, op.cit., p.55

4. SLCM: The sea-launched cruise missile was considered for deployment on submarines assigned to the NATO area. Its advantages are survivability and deployment flexibility. However, the cost of providing dedicated platforms seemed likely to make the SLCM option too expensive.
5. FB-111H: The FB-111H was a variant of the FB-111A bombers assigned to the Strategic Air Command and based in the United States. The FB-111H would presumably be based in Europe and would have somewhat longer ranges and higher payloads.<sup>66</sup>

On accession to the office, Defence Minister Hans Apel, who succeeded Defence Minister Leber in February 1978, inherited from his predecessor a TNF policy which was already, in its essentials, fully formulated. Apel did not agree with the concepts of escalation control and intra-war deterrence:

"Militärstrategen beider Bündnissysteme haben die Vorstellung, daß ein atomarer Schlagabtausch auf beiden Seiten Besinnung - und damit die Einstellung der Kampfhandlungen - auslösen könnte. Ich stehe solchen Überlegungen skeptisch gegenüber."<sup>67</sup>

In October 1978, at the NPG meeting in Brussels at which the extension of the Pershing II's range and its modernisation were finally opted for, Defence Minister Apel emphatically demonstrated his obvious disagreement with the proposals to modernise the TNF. Apel refused to commit himself to the general line which had been drawn by military experts. He wanted to maintain the primacy of politics and anticipated the explosive political power inherent in several details of the decision. The traditional NATO deficit in political discussion among the ministers and the NPG's mechanical approval of compromises which had been designed by the ministers' military experts roused Apel's criticism. However, his objection did not change the NPG's

---

<sup>66</sup> see Schwartz, 1983, *op.cit.*, p.226 and U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, pp.20-24

<sup>67</sup> "Military strategists in both pacts have the idea that a nuclear fight could bring both sides back to their senses - and thus to a termination of the hostilities. I am sceptical about such considerations." Hans Apel, "Freunde tritt man nicht vors Schienbein." *Der Spiegel*, (No.29, 1981) p.33-41, here p.39. These remarks are qualified when he concedes on the same page that options have to be credible in order to deter.

course regarding the LRTNF decision; the only consequences were that General Secretary Luns felt insulted.<sup>68</sup>

In October 1978 Brzezinski travelled to Bonn, London and Paris to sound out views at the political level. Brzezinski's position was essentially that the U.S. government did not see a military requirement for the LRTNF, but was quite prepared "to proceed with one if the Europeans wanted."<sup>69</sup>

The policy shift of the U.S. administration was expressed prominently in the Guadeloupe summit meeting between the British Premier Callaghan, the French President Giscard d'Estaing, U.S. President Carter and Schmidt on January 5 and 6, 1979 in the Caribbean. This meeting was initiated by Chancellor Schmidt, who had proposed it to Security Adviser Brzezinski when he visited Europe in October 1978. The purpose was to prevent another neutron bomb-type debacle, to involve the U.S. President in the decision at an early stage and to secure the participation of the most important allies.<sup>70</sup> This meeting is believed to have been one of the crucial steps in the decision-making process, in which the four leaders decided on modernisation. The sequence and content of the European leaders' answers to Carter's proposal to deploy U.S. missiles in Europe is again subject to various interpretations. According to Schmidt's own version, he was the last to answer because he represented a non-nuclear power:

"So Jimmy Callaghan answered first and said, This SS-20 problem must not be permitted to continue, but before you deploy American Eurostrategic weapons - the name Pershing did not come up; the type of weapon was not really discussed, nor the name - before you do that, I would propose that you negotiate the weapon with the Russians. Then came Giscard, who said, I think Callaghan is right, but the Russians will never negotiate seriously unless they are presented with the threat that if negotiations fail, the United States will unilaterally proceed and deploy their missiles. And I was the last one to reply,

---

<sup>68</sup> "Bundeskanzler Schmidt hat am Dienstag versucht, den über Verteidigungsminister Hans Apel erbosten Generalsekretär der NATO, Josef Luns, zu besänftigen." in "'Mißverständnisse' mit Luns bereinigt", *Süddeutsche Zeitung*, (October 25, 1978). "Bundesverteidigungsminsiter Hans Apel hat bei einer Diskussion in der NATO-Ministerrunde den Generalsekretär des nordatlantischen Bündnisses 'angemacht', wie man es in Barmbek nennt, schier, als sei Josef Luns führungsschwach." in "Barmbeker O-Ton in Brüssel", *Die Welt*, (October 25, 1978). "Primat der Politik auch in der NATO.", *Süddeutsche Zeitung*, (October 25, 1978). "Apel will die Führung nicht den Experten überlassen", *Frankfurter Rundschau*, (November 11, 1978).

<sup>69</sup> According to Garthoff, it was on this occasion that Brzezinski became fully aware of the issue for the first time, see Garthoff, 1983, *op.cit.*, p.202

<sup>70</sup> Haftendorn, 1985, *op.cit.*, p. 272

and I said, I buy the combined solution of Callaghan and Giscard. And in the end this is what Carter bought."<sup>71</sup>

After Guadeloupe, the LRTNF could no longer be stopped.

As a result of subsequent discussions in November 1978 and February 1979, the HLG suggested a mix of land-based systems. It was argued that sea-based systems were too similar to the Poseidon missiles. Leber rejected this option, according to Rühl because he was concerned that sea-deployed weapons intended for employment in the European theatre which would be controlled by external U.S. forces could paralyse the requested flexibility.<sup>72</sup>

In April 1979 the HLG submitted its final report to the NPG. It pressed the following resolution:

- The deployment package should consist of land-based cruise and ballistic missiles. It was felt that the Pershing II XR should be chosen over Longbow as the ballistic leg of the new LRTNF for two reasons: first, because Longbow would have needed more time for development than Pershing to be operational; secondly, because there was hope that the political provocation to the Soviet Union could be minimised by claiming that Pershing II XR was merely the upgrading of an existing system.
- The total number of missiles deployed should be greater than 200 in order to have a substantial effect, but less than 600 in order to avoid the impression that numerical balance with the SS-20 was being pursued. The argument was that a Eurostrategic balance would have a decoupling effect because thus the impression would be created that a war could be fought solely with European forces and without the support of the U.S. strategic forces. This would have provoked decoupling effects.
- Deployment should be shared among as many NATO allies as possible. This would ensure that West Germany would not be singled out to host

---

<sup>71</sup> Interview with Schmidt, *op.cit.*, p.92 and p.114. For a further description by another witness see Brzezinski, 1983, *op.cit.*, p. 290. See also the interpretation of Hoffmann that Schmidt was surprised by Carter's move, Hoffmann, *op.cit.*, p.495

<sup>72</sup> Rühl, 1987, *op.cit.*, pp.159

the new LRTNF, a situation that West German political leaders, wary of damaging detente with the East, insisted on avoiding.

- A final decision on LRTNF deployments should be made by December 1979. This would be necessary in order to avoid complications that might arise during the election campaigns both in West Germany and the United States and to provide enough time to prepare for deployment when the system was ready in 1983.<sup>73</sup>

After considering the report, the NPG directed the HLG to come up with a specific deployment package.

## **6.2. Predominance of German positions**

This chapter argues that on important issues the Federal Government succeeded to a considerable extent to shape the decision and have its interests considered.

### **6.2.1. Non-singularity**

The Federal Republic qualified its position regarding modernisation with a number of conditions aimed at not jeopardising the political gains Bonn had achieved in terms of relations with the East. Thus, the Bonn Government's overall goal was "political burden sharing":

- NATO should decide on new systems on the basis of a unanimous decision: no negative votes and no abstentions;
- the plan for LRTNF deployment plans must include, at the least, one non-nuclear European state in addition to the Federal Republic; this criterion was termed the non-singularity principle<sup>74</sup>;
- the Federal Republic had no intention of becoming a nuclear state or of playing any leadership role in questions of nuclear strategy. In this

---

<sup>73</sup> see Schwartz, 1983, *op.cit.*, p.227

<sup>74</sup> Since Adenauer's time, successive governments in Bonn had adhered to the principle of non-singularity to ensure that changes in NATO defence or arms control policies did not single out West German forces or territory for special treatment relative to other non-nuclear states. See Sharp, 1984, *op.cit.*, p.98



- respect, German officials stressed that it was the responsibility of the United States to take the lead in nuclear decisions within the alliance;
- any systems capable of striking Soviet territory and based in the Federal Republic would remain exclusively under American control with Germany providing only financial support and operating facilities. Unlike the arrangements for Pershing 1A, there would be neither dual-key arrangement for the new Pershing II missiles nor for the ground-launched cruise missile.<sup>75</sup>

Considering the nuclear status of France and Britain, the non-nuclear policies of Norway and Denmark, and current domestic problems in other member countries, the German participation criteria clearly focused attention on the Netherlands, Belgium and Italy. It was basically the German insistence on non-singularity and on an unanimous decision which made the Belgian and Dutch governments give in to the deployment of the missiles on their soil. In summer 1979, the Federal Republic even had made special efforts to convince the Dutch, Belgian and Luxembourg governments to deploy some missiles on their soil.<sup>76</sup> Opposition to the LRTNF modernisation programme was most effective and widespread in the Netherlands. While in the end the Dutch government failed in its attempts to reduce or postpone the programme, it prevailed with its added reservation that the Netherlands would not agree to participate in deploying the new systems for two years.<sup>77</sup> The Belgian government also took a reserved position, although not as extreme as the Dutch, since it announced its confirmation of the decision's application for Belgian territory in 6 months only if there were no serious progress in arms control talks. The smaller countries were annoyed with the Federal Republic because it had first instigated the need for modernisation and then imposed its own conditions.<sup>78</sup>

Richard Burt explicitly praises the Federal Government for its commitment in this question:

---

<sup>75</sup> U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, p.26/27

<sup>76</sup> According to Aviation Week and Space Technology of September 3, 1979, quoted in Elliot, *op.cit.*, p.19. Elliot also mentions that the support of the then SPD party leader Willy Brandt was influential in Italy as well as in Germany, p.30. See Elliot, 1981, *op.cit.*, p.19.

<sup>77</sup> U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, p.61

<sup>78</sup> U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, p.27

"One of the really positive things, by the way, about the theater nuclear force - from a political standpoint - is that once the Germans were convinced we were prepared to support this deployment they played an unprecedented role in working with the governments of these smaller countries to bring them along. That is true burden sharing."<sup>79</sup>

Jane Sharp criticises this policy of the Federal Government because of its negative arms control effects:

"Though wholly understandable, given West Germany's unique political status and geographical position on the forward edge of the alliance, this insistence on non-singularity has generated considerable tension, as, for example, when officials of the Schmidt government organized visits to other West European capitals to pressure reluctant governments to accept the ground-launched cruise missile components of the December 1979 NATO INF package. Thus German sensitivity to singular treatment complicates efforts towards East-West arms control and provides fertile ground for Soviet exploitation of intra-NATO strains."<sup>80</sup>

Thus, in the question of participation of other non-nuclear states the Federal Government managed, in the face of considerable obstacles, to ensure that the Netherlands and Belgium voted affirmatively and accepted a deployment admittance, whereas Italy seemed to have committed itself to deployment without raising problems.<sup>81</sup>

However, in contradiction to the German principle of non-singularity, the Federal Republic was the only country to deploy the Pershing II, due to its explicit mission of hitting the Soviet Union and its range of 1,800 km, which necessitated deployment as far "forward" as possible. The Pershing II was in the focus of criticism. With its high speed of 8-14 minutes, its accuracy and penetration capability it was supposed to be a first-strike weapon. The Federal Government certainly did not reckon with the extensive public debate sparked in West Germany and the Soviet Union's vehement reaction, and saw the Pershing II and the GLCM as a weapon-package rather than as two

---

<sup>79</sup> "Discussion" in Thompson, 1980, op.cit., p.235

<sup>80</sup> Sharp, 1984, op.cit., p.99

<sup>81</sup> "As others showed some hesitation, the Italians took pride in the fact that they could stand up and be counted on this one. It was a decision that fitted well with an increasing desire to play an active role in world affairs. A bella figura indeed!" see Elliot, 1981, op.cit., p.28

qualitatively different systems.<sup>82</sup> Helmut Schmidt and Hans Apel later conceded on that the Federal Republic's singularity in being the only country to deploy the Pershing II was a "political error" in regard to the Soviet Union.<sup>83</sup>

### 6.2.2. The land-based option

Many researchers and politicians in the Federal Republic who opposed the armament programme interpreted the final land deployment of the missiles as a defeat of Chancellor Schmidt on the important issue of the basing mode of the missiles. Schmidt had allegedly tried hard to push through a sea deployment of the missiles. Schmidt's defeat was again perceived as a concrete expression of U.S. hegemony in NATO:

"Der Plan (sea deployment, S.P.) hätte Bündnis- und entspannungspolitische Vorteile. Er ist so plausible, daß er in Bonn bedeutsame Befürworter fand. Doch widerspricht er amerikanischen Interessen. Washington möchte nicht in die Situation kommen, daß die Sowjets ein solches 'Europa' U-Boot mit 'taktischen' Waffen für ein Strategisches der USA halten und auf Grund einer 'Fehlperzeption' den Atomkrieg zwischen den Supermächten auslösen...Deutlicher lassen sich atomare Klassenunterschiede nicht demonstrieren."<sup>84</sup>

---

<sup>82</sup> The results of the HLG have been discussed regularly in the Federal Security Council since Autumn 1977. These meetings were prepared by interdepartmental discussions and coordination of the secretaries of state. Several times Ministers and the Federal Security Council met intensively and discussed the HLG's proposals. Thus the German acceptance of the Pershing II, cannot be explained in terms of lack of information. See Haftendorn, 1985, op.cit., p.271 and Risse-Kappen, 1985, op.cit., p.30

<sup>83</sup> See Helmut Schmidt, Rede auf dem Bundesdelegierten-Konferenz und Außenordentlicher Parteitag der SPD, Köln, November 18-19, 1983, Protokoll p.98-118, here p.107. Hans Apel, "Wir sind nicht der 51. Staat der USA", interview with Der Spiegel, No.44, October, 31, 1983

<sup>84</sup> "The plan (sea deployment, S.P.) would have advantages for the Alliance and for detente. It is so plausible that it has found important supporters in Bonn. But it contradicts U.S. interests. Washington does not want to get into a situation in which the Soviets would confuse such a 'European' submarine with tactical weapons with a U.S. strategic submarine and thus trigger a nuclear war between the superpowers because of a 'misperception'. There is no clearer way of demonstrating nuclear class differences." (Emphasis in the text). Christian Potyka, "Doppelstrategie mit Raketen", Süddeutsche Zeitung, November 16, 1979, p.4. See also Mohssem Massarrat: "Die US-Militär-Strategen erkannten offenbar, daß sich mit der Stationierung der neuen Mittelstreckenraketen der USA die Möglichkeit eröffnen würde, erstens, die erste Runde eines atomaren Schlagabtauschs mit der Sowjetunion vom eigenen Territorium auf Europa zu verlagern und zweitens mit Hilfe der landgestützten Version dieser Waffen die vorwärtsschreitende westeuropäische Supermacht, vor allem aber die Bundesrepublik, in Schranken zu verweisen und bei der Stange zu halten, weil diese dichtbesiedelte Region sich in

Opponents of the LRTNF decision objected bitterly against the land-basing of the missiles since ground-launched missiles represent attractive military targets for the opponent and thus provoke preemptive strikes. Helmut Schmidt's strong opposition against land deployment of nuclear missiles was mainly deduced from a statement he had given in 1961 when he did not yet hold governmental responsibility:

"Static, land-based missiles belong in Alaska, Labrador, Greenland, or even in the deserts of Libya and the Middle East - but emphatically not in thickly-populated regions. They act as magnets to the enemy's nuclear missiles. Anything that attracts enemy fire is unwelcome to states with a high population density or a small area."<sup>85</sup>

A 1982 quotation suggested that Schmidt had not revised his attitude completely:

"Think of a situation where an American Administration puts 5,000 nuclear rockets into Oregon and makes plans for adding some hundreds that could hit the Soviet Union and thereby make Oregon a great target area for Soviet missiles."<sup>86</sup>

However, there are indications that Schmidt's primary reason for opposing the land-based option was a different and politically motivated one: his eagerness to prevail on as many allies as possible to participate in the missiles' deployment.

---

eine atomare Zielscheibe der Sowjetunion verwandelt und so auch indirekt zur Geisel der USA wird. So scheinen die ursprünglichen Absichten des Kanzlers sich nunmehr in ihr Gegenteil verkehrt zu haben." ("Obviously the U.S. military strategists understood that by the deployment of the new intermediate-range missiles the United States gained the option, first, that the first round of a nuclear fight with the Soviet Union would be transferred from its own territory to Europe and, secondly, that by means of the land-deployed version of these missiles it would put the advancing Western European superpower, and most of all the Federal Republic, in its place, but would also back it up, because this densely populated area would be turned into a nuclear target for the Soviet Union. Thus, the original intentions of the Chancellor seem to have been turned into their opposite.") Massarrat, 1984, *op.cit.*, pp.37-38. Rudolf Augstein compares the situation with that of a chess player who all of a sudden has to take over the game of his opponent because the chess board has been turned over. Rudolf Augstein, *Der Spiegel*, No.22, 1981, p.32. See also Perdelwitz/Bremer, 1981, *op.cit.*, p.311. See also Alfred Mechttersheimer, "Atomarer Selbstmord auf Umwegen", interview in *Stern*, March 26, 1981

<sup>85</sup> This passage was quoted very often because it was so obviously in contradiction to land deployment of the missiles. Schmidt, 1962, *op.cit.* pp.89-90

<sup>86</sup> "Excerpts From Schmidt Interview on Key Issues", *NYT*, January 3, 1982

The reasons given for the High Level Group's final rejection of the sea-based option vary. The most important rationale was officially the symbolism and reassurance for some allies which are associated with nuclear capabilities based on the European continent:

"(P)referring land to sea-basing combined both military and political factors, namely, the perception that the deterrent effect of land-based missiles would be higher. Missiles based on European territory would be physically and unambiguously identified with European defence; they 'couple' Europe and the United States in an unmistakable fashion. A Soviet leader would be left in no doubt that a nuclear attack on Europe would be met by a nuclear response by the Alliance; Soviet territory would not be a sanctuary."<sup>87</sup>

The other arguments discussed in the High Level Group were:

- Land-based missiles are more effective, because they permit deliberate escalation and selective use. What is involved is the greater accuracy of land-based missiles as opposed to sea-based missiles, plus the fact that the latter are characterised by communication problems.<sup>88</sup>
- As regards sea-based systems, in the long term, only, at most, one half or one third of them can be kept operational. In order to keep a certain amount of systems operational, twice or even three times as many systems would have to be provided.<sup>89</sup>
- Sea-basing would create problems of command and control. With ground-launched cruise missiles the battery commander is an American. The situation would be more complex with SLCM. If there were allied ships under control of U.S. units, unresolvable problems similar to those of the Multilateral Force would arise.
- A number of problems concerning participation would also have arisen. The Norwegians, in particular, opposed sea-basing for fear that NATO submarines would seek the protection of Norwegian inland waters for their operations and thus expose Norway to Soviet retaliation.<sup>90</sup>

---

<sup>87</sup> Cartwright/Critchley, 1985, op.cit., p.17, see also Treverton, 1981, op.cit., p.39

<sup>88</sup> Cartwright/Critchley, 1985, op.cit., p.17

<sup>89</sup> Hoffmann, 1986, op.cit., p.444. A West German Foreign Ministry paper is even more pessimistic and estimates that only a quarter would be kept operational, which would necessitate three to four times more systems than actually needed for employment. See Auswärtiges Amt, Internes Argumentationspapier des Auswärtigen Amtes zur See-/Landstationierung der LRTNF vom 22.Mai 1981, p.3, made available to me by Thomas Risse-Kappen

<sup>90</sup> Treverton, 1981, op.cit., p.13

- Deployment of missiles on existing platforms for the sea-basing would have led to operational complications. The production of new platforms would have raised the costs considerably.<sup>91</sup>
- Since the Pershing was supposed to target the Soviet Union, range deficiencies would have anyhow prohibited the deployment of Pershing at sea. If the cruise missile had been deployed at sea, the Federal Republic, because it was the only country to deploy the Pershing, would have been left in a singular position - the only country to have land-based missiles.
- On a political level, the policymakers were anxious that the need for continuous port calls of the missiles carrying ships could cause political protest. It was assumed that protests over land-based missiles would dissipate after deployment.
- Arms control negotiations are believed also to have played a role in this question because sea-based cruise missiles are supposed to complicate arms control negotiations more than land-based missiles, which is true for the necessary verification procedures of any arms control agreement.<sup>92</sup>
- With a range of 2,500 kms, deployment of these SLCM stationed on submarines could have been considered only on the seas close to Europe. This limitation of a deployment area for the submarines would have invited the Soviet Union to intensify its Anti-Submarine-Warfare (ASW).<sup>93</sup>
- If the force consisted of U.S. ships only, they would be regarded as an adjunct of U.S. strategic forces. Since sea-launched missiles can be regarded as strategic weapons, they are in danger to be included in arms control negotiations on strategic weapons, such as SALT and START, and thus would be counted against the subceilings of the U.S. strategic arsenal. In contrast to them, ground-launched TNF are clearly non-strategic weapons, for which at this time there did not yet exist an arms control forum.

Since new ships had to be built for sea deployment of the missiles, it can be assumed with some justification that the cost factor was also an important

---

<sup>91</sup> Holst, 1983, op.cit., p.516

<sup>92</sup> For the last three horizontal dashes see Cartwright/Critchley, 1985, op.cit., p.17

<sup>93</sup> Hoffmann, 1986, op.cit., p.443

motive for the European rejection of the sea-deployed cruise missile.<sup>94</sup> Thus the Europeans seem to have rejected the sea-based option themselves.<sup>95</sup>

Several sources report unanimously that Schmidt tried to leave open the option of the sea-based cruise missile.<sup>96</sup> In an interview Schmidt stated that the Americans refrained from getting too involved in these discussions. He aimed to include the Danes and the Norwegians in participating by hosting port calls by SLCM carrying ships and proposed to deploy the cruise missile on herring trawlers. Since his proposal would have necessitated the denomination of several ports, from Portugal via Britain to West Germany, as locations for the ships, his European colleagues rejected Schmidt's idea.<sup>97</sup>

Thomson confirms Schmidt's description:

"Chancellor Schmidt ruminated about the possibility of including the SLCM in the deployment program, in the hope that the Danes and Norwegians would participate in the program by hosting port calls by SLCM carrying ships. However, this idea was clearly a non-starter and was quickly dropped by the German government."<sup>98</sup>

The West German Ministry of Foreign Affairs also rejected sea deployment with the hint that national participation could not be achieved by land deployment. After mentioning almost all the reasons for land deployment which have been

---

<sup>94</sup> "Cost was also crucial; sea-based systems would be more expensive, either directly if new submarines (or fast surface craft) were built as launch platforms, or indirectly if existing attack submarines were converted to the cruise missile role." Trevorton, 1981, *op.cit.*, p.13. The paper of the Ministry of Affairs estimates 1.5 to 2 times more costs for sea-basing than for land-basing. Auswärtiges Amt, 1981, *op.cit.*, p.3

<sup>95</sup> Josef Joffe assumes that the anticipated high expenditures caused the Europeans to reject the sea-base option themselves. See Josef Joffe, "Von der Nachrüstung zur Null-Rüstung. Die Geschichte des Doppelbeschlusses. Innenpolitik war wichtiger als Militärstrategie," in *Die Zeit*, November 27, 1981a, pp.17

<sup>96</sup> Risse-Kappen, 1985, *op.cit.*, p. 39 and Sharp, 1984, *op.cit.* p.120. Hoffmann reports statements Helmut Schmidt made during an interview that even as late as spring 1980 Schmidt requested the HLG and the Special Consultative Group, the successor of the Special Group, to examine in how far at least part of the cruise missile deployment package could be deployed at sea. Interview with Helmut Schmidt in Hoffmann, 1986, *op.cit.*, p.445

<sup>97</sup> Interview with Helmut Schmidt in Hoffmann, 1986, *op.cit.*, p.446 and p.444. See also Helmut Schmidt in an interview with Risse-Kappen, June 11, 1985.

<sup>98</sup> Thomson, 1984, *op.cit.* p.610

discussed above, the Ministry of Foreign Ministry points out the possible arms control problems if the missiles were sea-deployed:

"Würde sich die NATO entscheiden, statt land-gestützter Raketen in Zukunft nur seegestützte Marschflugkörper einzuführen, würde damit die Geschäftsgrundlage für den Rüstungskontrollbeschluß von Dezember entfallen... Mit der Aufgabe der Landstationierung und der damit verbundenen unmittelbaren politischen und territorialen Beteiligung der europäischen Bündnispartner würden die Europäer ihren erheblichen Einfluß auf die künftige Gestaltung der amerikanischen Rüstungskontrollpolitik einbüßen."<sup>99</sup>

With the cruise missiles' deployment on surface ships a secure deployment of the missiles would not have been achieved anyway, since they can easily be monitored by the Soviets with aircraft, satellites and vessels. In comparison to cruise missiles based on surface ships, ground-launched missiles possess an even higher survivability, owing to their deployment in hardened shelters. A secure deployment of the missiles would not have been achieved.

Schmidt's intervention was passed to the HLG. Had this been an intervention of high priority for Schmidt, he already would have put it forward at the Guadeloupe summit, as he had done in the case of the German *sine qua non* principle of non-singularity.<sup>100</sup> Risse-Kappen confirms this interpretation:

"The proposal was promptly rejected by other allied governments and then dropped by the West German government too, not least of all since it did not factor in the five essentials formulated at the Guadeloupe summit."<sup>101</sup>

Thus, it was the Federal Republic's European allies who pushed for land deployment, and not the American allies. Norway in particular, have been anxious about losing its status as a nation which does not allow the deployment of nuclear weapons in peacetime, had it been forced to offer its territorial waters

---

<sup>99</sup> "If NATO decided to introduce only sea- instead of land-deployed cruise missiles in the future, the basis for the NATO Dual-Track decision would be removed. With the renunciation of land deployment in which the European allies were directly involved politically and territorially, the Europeans would lose their considerable influence on the future characteristics of U.S. arms control policy." Auswärtiges Amt, 1981, *op.cit.*, emphasis in the text, p.4. For the political reasons for land deployment see also Helmut F. Dräcker, Warum die Friedensbewegung scheitern mußte. Gedanken zu den deutsch-amerikanischen Beziehungen 1980-1984. (Frankfurt am Main: Sandler Verlag, 1985), pp.98

<sup>100</sup> Helmut Schmidt brings up this point himself in his interview with Risse-Kappen.

<sup>101</sup> Risse-Kappen, 1988, *op.cit.*, p.46



for the operations of the ships equipped with cruise missiles. The same may have been true of Denmark. Britain is also reported to have objected to sea deployment.<sup>102</sup> Thus, the Federal Republic was the only nation which advocated sea deployment on surface ships, and there is evidence that Helmut Schmidt was the only one who represented these ideas among his military experts.

Hence, on the one hand, sea-based cruise missiles would have involved at least to take into consideration Norwegian and Danish participation. On the other hand, range deficiencies would have prohibited the deployment of Pershing at sea. But precisely the necessity of Pershing's land deployment and the existence of sea-based cruise missiles would have left the Federal Republic in the singular role of being the only country to deploy land-based missiles. Thus, Chancellor Schmidt had to weigh an avoidance of a general "singularity" by the participation of other allies in the weapons programme against a particular "singularity" in terms of land-basing deployment. Consequently, Schmidt must have preferred the land-based solution after it turned out that Norway and Portugal rejected any deployment and that the Federal Republic was the only country to deploy the Pershing II.

### 6.2.3. Insistence on link to Arms Control

On April 6, 1979 the "Special Group" on Arms Control and Related Matters was constituted by NATO to work out an arms control proposal to accompany the missile deployment decision which later comprised the second track of the NATO Dual-Track decision.<sup>103</sup> There is no doubt among the researchers that the establishment of the Special Group was mostly a result of the initiatives of German politicians in cooperation with the Dutch government.<sup>104</sup> The Special Group consisted of arms control specialists from all Alliance countries except

---

<sup>102</sup> British Defence Minister Fred Mulley in his reply to Defense Secretary Harold Brown wrote of the need for new land-based deployments in Europe that would be more visible than the Poseidon and more capable than the aging F-111. See Barry, 1983 *op.cit.*, p.17

<sup>103</sup> see Garthoff, 1983, *op.cit.*, p.204

<sup>104</sup> Dr. Ruth of the Ministry of Foreign Affairs acted on behalf of the German government. See Risse-Kappen, 1985, *op.cit.*, p.36, and Schwartz, 1983, *op.cit.*, p. 231

France and was chaired by the Director of Political and Military Affairs of the U.S. State Department, Leslie Gelb (later Reginald Bartholomew).

The fact that the Special Group was not established until April 1979, when the main decision concerning the deployment programme had already been taken in the High Level Group, meant that weight would no longer be given to the destabilising implications of the weapon programme (in particular those of the Pershing II) or to arms control problems such as the verification of limitations on numbers of the small, dual-capable cruise missiles.<sup>105</sup>

This chronology arouses suspicion with regard to NATO's seriousness about arms control results:

"Deciding on arms control negotiations essentially as a potential device to mobilize support for a deployment program was almost bound to give arms control considerations a secondary role."<sup>106</sup>

On September 28, 1979 the High Level Group and the Special Group met for the first and only time. The report of the two groups then had to be converted into a document that NATO had to agree to in December. A series of interagency meetings involving the National Security Council, the State Department, the Arms Control and Disarmament Agency (ACDA) and the Defense Department combined the two reports into what became known as the "Integrated Decision Document".<sup>107</sup>

The Special Group established a number of guidelines, the most important being:

1. the work of the High Level Group constituted the basic point of reference for the Special Group;
2. arms control negotiations would be neither realistic nor possible without an agreed modernisation plan and a decision to implement the plan;
3. LRTNF negotiations should be conducted within the SALT II framework;

---

<sup>105</sup> For the arms control problems of cruise missile see Bittorf, 1986, op.cit.

<sup>106</sup> Garthoff, 1983, op.cit., p.205

<sup>107</sup> Schwartz, 1983, op.cit., p.232

4. the negotiations should ensure equality in terms of ceilings and rights.<sup>108</sup>

On a West German initiative, the principle was integrated that future limitations of U.S. intermediate systems would be accompanied by "appropriate" limitations of the Soviet weapons. But the term "appropriate" allows various interpretations. This implies that the precise level of SS-20 that the Alliance could live with had not been established, nor had the corresponding numbers of NATO LRTNF then required been determined.<sup>109</sup>

The most decisive guideline was the so-called non-renunciation clause, which stated that arms control would be neither realistic nor possible without an agreed modernisation plan and a decision to implement the plan and that "LRTNF arms control was a complement to, not a substitute for LRTNF modernization".<sup>110</sup>

This implies that the NATO organ which was due to draft arms control proposals excluded the "zero-option", which was proposed by U.S. President Reagan in November 1981. He announced that the U.S. and NATO were prepared to cancel deployment of Pershing II and GLCM in Western Europe if the Soviets agreed to dismantle their SS-20, SS-4 and SS-5 missiles.<sup>111</sup> Reagan's proposal was the basis for the INF treaty of 1987. Thus the Special Group with its non-renunciation clause did not prevail.

The inability or unwillingness to elaborate a consistent and concrete approach to arms control on the part of the Federal Republic can be seen in the following timetable of events:

By March 1978 the High Level Group had agreed on LRTNF modernisation. Only in February 1979 (one year later) did the Federal Government for the first time formulate its official attitude towards the INF issue provoked by an

---

<sup>108</sup> *ibid.*, pp.231-232

<sup>109</sup> see U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, p.31

<sup>110</sup> Schwartz, 1983, *op.cit.*, p.232. Thomson reports that it was the most important principle from the U.S. perspective. Thomson, 1984, *op.cit.*, p.609. For a discussion of the guidelines see Cartwright/Critchley, 1985, *op.cit.*, p.20

<sup>111</sup> U.S. Policy Information and Texts, The INF Talks: A Chronology, September 24, 1987

interpellation of all parties of the Bundestag.<sup>112</sup> In parallel with this public debate, Department 220 of the Foreign Ministry and Section FÜS-III of the Ministry of Defence were instructed to develop an approach to incorporate the INF systems into arms control.<sup>113</sup> Thus, the formulation of the government position was tackled one year after the consensus in the High Level Group to modernise the weapons. The Federal Republic failed to design an applicable and consistent concept of arms control for the INF negotiations.<sup>114</sup>

---

<sup>112</sup> Answer of the Federal Government to the parliamentary questions by the SPD/FDP and CDU/CSU on February 16, 1979, Bundesdrucksache 8/2587, pp.20-23

<sup>113</sup> see Risse-Kappen, 1985, op.cit., p.34

<sup>114</sup> Haftendorn explains this delayed reaction by the Federal Government in terms of the different arms control concepts of the Ministry of Foreign Affairs on the one hand, and the Ministry of Defence and the Office of the Federal Chancellery on the other. The difference is mainly explained by the Foreign Ministry's much more pronounced orientation towards a close alliance with the United States and towards consideration of U.S. interests. Haftendorn describes the quarrels between Genscher and Apel/Schmidt in the Federal Security Council with Genscher being the keeper of the grail of American interests and flexible response strategy, while Schmidt and Apel are reported to have discussed alternatives and handed in options for negotiations. Thus the conflict is explained as having erupted between the coalition partners. See Haftendorn, 1985, op.cit., p.271 and Haftendorn, 1986, op.cit., p.30. By indiscretion two secret documents were made public in spring 1982, which confirmed this perception of the policy line. The Foreign Ministry pleaded for a close connection with the United States, while a secret study of the Office of the Federal Chancellery advocated distancing from the United States. See Eberwein/ Kelleher, 1983, op.cit., p.121. Analogous to this perception of the Foreign Office's narrower approach to arms control, several experts blame the government members of the Liberal party, above all, for the failure of the arms control negotiations. Butterwege, for example, holds the Foreign Ministry mainly responsible for the stalemate in the MBFR (Mutual Balanced Force Reductions) talks on conventional forces in Europe. See Christoph Butterwege and Heinz-Gerd Hofschien, Sozialdemokratie und Frieden, (Heilbronn: 1984) p.341. Albrecht cites a long statement by a member of the Liberal party, Runge, in which Runge blames Genscher for the stalemate in Vienna, for the agreement of the Federal Republic to deploy the neutron bomb on German soil and for an irresponsible, humble attitude towards the United States. He also blames Genscher for cancelling Schmidt's plan to arrange a moratorium on the deployment of Eurostrategic weapons by a cabinet decision. He characterises Genscher as "unconditionally anti-Soviet". See Albrecht, 1982, op.cit., pp.163-168

## Conclusion

In contrast to common perception, the Federal Republic, as a NATO ally, participated actively in the Nuclear Planning Group, which during its first years established the Provisional and Political Guidelines for the first and follow-on use. The schedule for the modernisation of theatre nuclear forces was an unavoidable result of the NPG's search for military means to implement flexible response. As a materialisation of the NPG's plan to modernise the TNF in the direction of greater selectivity and flexibility, the NATO allies were offered the advanced cruise missile technology and the neutron bomb. The German delegation in particular showed considerable interest in the new technology of the "cruise missile" which was a result of the U.S. elaborations on limited nuclear strategic options. When it became clear during the SALT negotiations that the cruise missile was also intended to play the role of a bargaining counter, German politicians used the consultations in context of the SALT negotiations to intervene in favour of maintaining the cruise missile option, in particular, the ground-launched version. Since in SALT-I German politicians had also pushed exclusion of the FBS from the negotiations, the conclusion is warranted that German strategic experts envisaged deployment of U.S. long-range theatre nuclear weapons for employment in the European theatre as being indispensable for securing German defence interests. The U.S. administration, which was reluctant to yield to these German requests and to redeploy LRTNF in Europe, after the neutron bomb debacle decided to use the LRTNF deployment decision as a means of demonstrating effective U.S. leadership in NATO. Pressure from the U.S. Defense Department to deploy new LRTNF in Europe also played a role in the shift of the U.S. administration's TNF policy, although the Head of the Pentagon, Defense Secretary Harold Brown, first had to be convinced of the LRTNF's merit.

The final plan of the deployment decision within the HLG incorporated, to a considerable extent, German political principles. The Federal Republic prevailed in its most important guideline of non-singularity in nuclear decisions and succeeded in increasing the number of participants in the deployment programme. Also the land deployment of all missiles, which was perceived as an important defeat for Schmidt's attempt to push through their sea-basing, should be regarded as an inevitable result of the attempt to avoid the Federal Republic being the only country to deploy the missiles on land. The second track of the NATO Dual-Track decision, i.e. the offer of arms control to

the Soviet Union, is also due to pressure exerted on the part of German politicians. However, the lack of concrete arms control proposals suggests that German politicians regarded the second track predominantly as a means to forestall public criticism on the deployment decision. Hence, the deployment track of the 1979 NATO decision is to a considerable extent the result of pressure exerted by German politicians in NATO and in their consultations with the United States. It seems that the Federal Republic's room for manoeuvre within NATO and in relation with its U.S. ally is greater than generally assumed.<sup>115</sup>

In order to determine whose interpretation prevails in NATO, it is necessary to shift the focus of attention to the weapons' employment options.

---

<sup>115</sup> Official statements suggest a similar interpretation. When Schmidt was asked about his assessment of West Germany's room for manoeuvre within NATO he answered: "Es wäre ein Irrtum zu meinen, die europäischen Bündnispartner der Vereinigten Staaten von Amerika hätten keinen politischen Spielraum." (Translation: "It would be an error to believe the European allies of the United States have no room for political maneuver.") in *Der Spiegel*, (No.6, February 4, 1980) p.32. Bahr responded in the same way when confronted with the argument that the Federal Republic has to deploy what the United States produces: "Aber wir hatten doch praktisch einen Einfluß auf diese Produktionsentscheidung. Die Amerikaner wollten die Pershing II nur produzieren, wenn die Europäer im Prinzip bereit wären, sie auch zu stationieren. Die amerikanische Produktionsentscheidung ist gekoppelt gewesen an die Zusage der Europäer, die Mittelstreckenraketen auch zu stationieren." (Translation: "But we did have an influence on this decision in favour of production. The Americans only wanted to produce the Pershing II if the Europeans were in principle ready to deploy them. The Americans' decision on production was coupled with the Europeans' promise to deploy these medium range weapons.") see Egon Bahr, *Was wird aus den Deutschen? Fragen und Antworten*, (Reinbek bei Hamburg: Rowohlt Verlag, 1982), p.157. These results were backed up by Alex A. Vardamis, who argues that West Germany would no longer be completely dependent on the United States and that it had become a world power in its own right. See Alex A. Vardamis, "German-American Military Fissures", *Foreign Policy*, (Spring 1979) pp.87-106.

### **Section III: The Solution of the LRTNF modernisation: its possible employment options**

This section should provide an answer to the question of whose interpretation of flexible response dominated in the request for intermediate-range, land-based and, therefore highly vulnerable nuclear- tipped ballistic and cruise missiles: the German or the U.S. interpretation. To clarify this problem different employment options will be discussed. The assumption that the LRTNF can be regarded as spearheads of a U.S. first strike strategy will be disproved. The Schlesinger doctrine with its implied revision of TNF shall be analysed with regard to what extent the weapons have originated in U.S. defence programmes. The German first use concept is presented in an illustrative way by an analyst of Ebenhausen. His analysis will serve to clarify the employment options of the LRTNF in German doctrines. The section will, however, begin with elaborating the compatible elements in the U.S. and German doctrines.

#### **7. Compatible strategic doctrines and rationales**

The chapter will start with a brief discussion about the role that the SS-20 played in respect to the evolution in the development of the LRTNF decision. It will be argued that the compromise can be presented as a mutual U.S. and German acceptance of providing means for escalation control. The ambiguous data of the Pershing II, in particular concerning the number to be deployed, its range and the question whether it is able to attack new targets, seemed to have helped that U.S. and German strategic experts were able to compromise on the LRTNF, since the ambiguous data impeded a clear determination of the LRTNF's employment options. Finally it will be argued that the traditional distinction between U.S. "war-fighters" and German "deterriers" is no longer helpful for analytical purposes.

#### **7.1. Key Justification for the LRTNF Decision: the SS-20**

The official rationale for the NATO-Dual Track decision is the Warsaw Pact's implementation of programmes to modernise and expand its long-range theatre nuclear forces:

"In particular, they (the Soviet Union, S.P.) have deployed the SS-20 missile, which offers significant improvements over previous systems in providing greater accuracy, more mobility, and greater range, as well as having multiple warheads, and the Backfire bomber, which has a much better performance than other Soviet aircraft deployed hitherto in a theatre role. During this period, while the Soviet Union has been reinforcing its superiority in Long-Range Theatre Nuclear Forces (LRTNF) both quantitatively and qualitatively, Western LRTNF capabilities have remained static."<sup>1</sup>

In September 1974 the Soviet Union conducted its first test flight with a SS-20. From 1976 onwards the Soviet Union deployed the middle-range SS-20 ballistic missile<sup>2</sup>. Until a freeze in 1984, the number of SS-20 was steadily increased to 417 deployed and 356 non-deployed SS-20 missiles. Thus, the Soviet Union had produced 826 missiles, which all are slated for destruction now as a result of the INF treaty.<sup>3</sup> The SS-20 is a ballistic missile with a range between 4,000-4,500 kms (Soviet indications) and 5,000 kms (U.S. range estimate). The solid-fueled SS-20 missile possesses up to three warheads and scores higher on readiness than the SS-4 and SS-5. It is mobile and therefore less vulnerable, and consequently "a capable war-fighting" weapon.<sup>4</sup>

However, researchers differed in their interpretation of the significance of these improvements. A debate arose whether the Soviet Union had gained a new military option, i.e. the capability for a selective employment plan (SEP), with the SS-20. But critics cannot foresee circumstances in which the Soviet Union might employ its nuclear forces to a limited use to signal escalation against Europe. In view of its technical deficiencies, the SS-20's capability of implementing selective employment plans has been doubted, since a selective use of nuclear weapons necessitates missiles with relatively small warheads and a high accuracy. However, due to the combination of the SS-20 warheads' yield of 150 to 500 kilotons, and its accuracy of 400 metres, it could not avoid collateral damage.<sup>5</sup> According to military logic, too heavy collateral damage

<sup>1</sup> Communiqué in Cartwright/Critchley, 1985, op.cit., p.151

<sup>2</sup> Rühl, 1987, op.cit., p.123

<sup>3</sup> INF Treaty, 1987, op.cit., p.3

<sup>4</sup> Sverre Lodgaard, "Long-range Theater Nuclear forces" in SIPRI Yearbook 1983, Stockholm International Peace Research Institute (London: Taylor and Francis, 1983), pp.3-25, here p.10

<sup>5</sup> In comparison with the SS-20, the Pershing II has a yield of approximately 5-50 kilotons and an accuracy of 20-45m CEP; see Cochran et.al., 1984, op.cit., pp.294-295. For the data of the SS-20 see also Sigal, 1984, op.cit., p.39



provokes retaliation from the attacked, a reaction, which, if a war started, would have to be avoided and is incompatible with the objective of escalation control.

The question whether the Soviet Union gained escalation dominance with its SS-20 deployment<sup>6</sup> will not be discussed here in detail, because the analysis of the evolution of the LRTNF deployment demonstrates that NATO developed a rationale for the deployment of weapons independently of the SS-20. There are important members of the strategic community such as Simon Lunn, Deputy Secretary of the North Atlantic Assembly, who supported the validity of this approach:

"Initially, NATO's modernization decision arose from the political judgment that NATO's strategy of flexible response required systems based on European territory and capable of striking the Soviet Union, and thus the military / technical judgment that existing assets (F-111s and Poseidon reentry vehicles) were no longer adequate. The SS-20 made NATO's situation worse (how much worse is debatable) but modernization requirements were not directly related to the number of SS-20 deployments."<sup>7</sup>

Also Johan Holst, then Director of the Nors Utenrikspolitisk Institute, confirms this evaluation:

"Der Beschluß beruht auf einer zweifachen Begründung, einer Anzahl von militärischen und einer Anzahl von politischen Erwägungen. Die militärische Begründung war im großen und ganzen unabhängig von der Tatsache der Aufrüstung mit der SS-20 Rakete."<sup>8</sup>

West German politicians in particular used the argument of the SS-20 as a legitimization for the deployment of U.S. weapons on their soil. In fact several analysts criticised the politicians for their stress on the SS-20, because that

---

<sup>6</sup> See on this question the discussion between Dieter Senghaas and Lothar Rühl in Sicherheit und Frieden, Vol.5, No.4, 1087, pp.266-271

<sup>7</sup> Simon Lunn, "At issue: nuclear modernization in Europe" in The Bulletin of Atomic Scientists, Vol.38 (August/September 1982) pp.17-23, p.19. For another discussion of this question see Peter Seidel, Die Diskussion um den Doppelbeschluß. Eine Zwischenbilanz, (München: Bernhard und Graefe, 1982), pp.70-82.

<sup>8</sup> "The decision is based on a twofold rationale, a number of military and a number of political considerations. On the whole the military rationale was independent of the build-up with the SS-20, focusing instead on requirements for counterstrikes over long distances against Soviet forces of the second and third wave and their accompanying infrastructure." Johan Jorgen Holst, "Nukleare Mittelstreckenwaffen und das politische Gleichgewicht in Europa", Europa-Archiv, (Vol.38, No.17, 1983), pp.507-516, here p.507

evoked the impression that it would be possible to avoid the deployment of all new Pershing II and cruise missiles.<sup>9</sup> Comparisons of the force ratio between the Warsaw Pact and NATO in the area of intermediate-range missiles played a major role in the debate on the NATO Dual-Track decision until 1981. After 1981 the focus of attention shifted to the strategic implications involved in the decision. The complexity and difficulty of the issue is expressed in the astonishing range of figures expressing the force ratio between the Warsaw Pact and NATO: they range from nearly 1:1, estimated by the IISS<sup>10</sup> to the ratio of 3.5:1 estimated by the German White Papers<sup>11</sup> up to Reagan's estimate with the worst case- figure of 6:1.<sup>12</sup>

Without providing an assessment of the force ratios, only a few indications will be given to demonstrate the limits of significance of any force ratios, especially those concerning the intermediate-range theatre nuclear forces:

- weapons of a comparable group, range and yield can have very different qualities. These qualities are expressed by accuracy, penetrability, reliability, mobility, reloading capability, survivability, capability to penetrate the enemy's defence, targeting options, doctrines, exchange scenarios and the endurance of C3I facilities (command, control, communication)<sup>13</sup>

---

<sup>9</sup> See Trevorton, 1983, op.cit., p.96; Cartwright and Critchley, 1985, op.cit., p.8-10; Christoph Bertram, The Implications of Theater Nuclear Weapons in Europe, Foreign Affairs, (Winter 1981/82), pp.305-326, here p.318

<sup>10</sup> International Institute for Strategic Studies (IISS), The Military Balance 1979-1980, (London: IISS, 1980), pp.114-117

<sup>11</sup> Weißbuch 1979, op.cit., pp.105-109

<sup>12</sup> See the Reagan speech of November 18, 1981 in Michael Getler, "U.S. Marshalling Detailed Figures to back views of Soviet Strength" in International Herald Tribune, (November 23, 1981). Milton Leitenberg has made a compilation of the results of the most important force comparisons, see Leitenberg, 1986, op.cit., p.206. For a general criticism of Warsaw Pact-NATO force ratios, see Andreas von Bülow, "Problematik eines Kräftevergleichs zwischen NATO und Warschauer Pakt", in Soldat und Technik, (No.6, 1979), pp.289-293

<sup>13</sup> For the problem of force comparisons see Dieter S. Lutz, Weltkrieg wider willen? Die Nuklearwaffen in und für Europa, (Reinbek bei Hamburg: Rowohlt, 1981) pp.58-72 ; Hubertus Hoffmann, Atomkrieg-Atomfrieden. Technik, Strategie, Abrüstung, (München: Bernard und Graefe, 1980), p.140 ; Karl-Peter Stratmann, "Das 'eurostrategische' Kräfteverhältnis. Zweifelhafte Bewertungen als Folge der Anwendung unterschiedlicher Kriterien" in Europa-Archiv, (Vol.36, No.13, 1981a) pp.387-398

- geostrategic differences between the Soviet Union and the United States cannot be neglected. As opposed to the United States, the Soviet Union is encircled by the United States's allies. Therefore the Soviet Union insists on defining as "strategic" all weapons which are able to reach its territory, thus including all Eurostrategic weapons and the U.S. Forward Based Systems<sup>14</sup> based on European soil. The Americans refuse this definition. On the other hand, a Soviet short-range missile represents a strategic threat to the Federal Republic of Germany. The difficulties of defining 'strategic', 'Eurostrategic' and 'tactical' weapons in arms control negotiations result from these geostrategic asymmetries.
- The official allocation of 'strategic' systems to 'theatre' missions also causes problems. U.S. central strategic systems clearly overlap in target coverage with the nuclear systems based in Europe. Likewise, a number of Soviet intercontinental ballistic missiles (ICBM) are known to be targeted against Western Europe. In this context the categorisation of the submarine-launched Poseidon missiles created the most significant problems, with a total of 400 missiles. On the one hand the Poseidon were already included in the SALT II aggregates, which means that they are defined as having basically "strategic missions", while on the other hand the Poseidon are assigned to SACEUR and designed for targets in the European theatre, and thus have to be grouped with "Eurostrategic" or "tactical" weapons.<sup>15</sup>
- One side can gain new military options by a technological development which the other side cannot match. An example of the importance of a new technological development is the U.S. introduction of warheads with several independently targetable warheads, the so-called Multiple Individually-targeted Reentry Vehicle (MIRV).<sup>16</sup> Thus the U.S. military planners gained what they call a "new military option" and a further complication of arms control, because from that time on the traditional approach "one missile - one warhead" was no longer valid.
- There is no agreement whatsoever whether the British and French arsenals should be included in the compilations of the nuclear weapons.

---

<sup>14</sup> A detailed discussion of the U.S. FBS is given in chapter 5.2.

<sup>15</sup> For technical details of the Poseidon see Cochran, 1984, *op.cit.*, pp.136-137. See also U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, p.48

<sup>16</sup> The United States introduced the MIRV in 1970, the Soviet Union in 1975, see Lutz, 1981, *op.cit.*, p.31

- The characteristics of several systems make their precise categorisation difficult. For example, the ranges of aircraft vary substantially according to their mission and payload. The matter is further complicated by the fact that they can be used for conventional and nuclear missions, and are thus dual-capable.
- The Soviet Union is also surrounded by its Asian antagonists. Therefore a considerable portion of the Soviet forces, such as for example, the SS-20, are deployed in the Asian part of the Soviet Union. Yet in a moment of crisis they could be transported to the European part of the Soviet Union. The same applies to the long-range strike aircraft such as the FB-111 based in the United States, which could be dispatched to Europe in a matter of hours during a crisis.

In May and June 1976 the NPG, the DPC and the North Atlantic Council reacted publicly for the first time to the SS-20 by stating "their concern at the sustained growth in the Warsaw Pact countries' military power, on land, on sea and in the air beyond levels apparently justified for defensive purposes"<sup>17</sup> and "at the resulting effect on the strategic balance between East and West, particularly in regard to Europe."<sup>18</sup> In December 1976 NATO's Defence Ministers for the first time officially commented concretely on the SS-20.<sup>19</sup> In view of NATO's alleged irritation over the SS-20, Garthoff finds it "remarkable" that no real analysis of the Soviet purposes in deploying the SS-20 was undertaken by any kind of NATO body.<sup>20</sup>

Public attention outside the immediate NATO sphere was drawn to the SS-20 in September 1976, when Fred Ikle, at that time Director of the U.S. Arms Control and Disarmament Agency, compared the SS-20 to "'a dark cloud towering over Europe and Asia'."<sup>21</sup> But Ikle's speech had been not authorised by the State

---

<sup>17</sup> see Communiqué of the North Atlantic Council, May 20-21, 1976, in NATO, Communiqués Vol.II, op.cit., p.11

<sup>18</sup> see Communiqué of the NPG, June 14, 1976, in ibid., p.19

<sup>19</sup> Communiqué of the DPC, December 7-8, 1976 in ibid., p.24

<sup>20</sup> Raymond Garthoff was deputy director of political-military affairs in the Department of State, 1983, op.cit., p. 201. See also "The Soviet SS-20 Decision" in Survival, (Vol.25, No.3, May/June 1983a) pp.110-119 and "Moscow's Less-Than-Ominous Reasons for Deploying SS-20's" in NYT, May 13, 1983, p.30

<sup>21</sup> quoted in Thomson, 1984, op.cit., p.602.

Department, which did not circulate the text.<sup>22</sup> The State Department's reservations were caused by the Ford administration's attempt to achieve a follow-up agreement to SALT I with the Soviets.

However, it has to be conceded that, although the SS-20 did not cause the LRTNF modernisation and deployment decision, the Soviet missiles' continuous build-up certainly stimulated the whole process in NATO and convinced inexperienced politicians who were unsure about whether or not to support the deployment track of the NATO 1979 decision.

## **7.2. LRTNF as a means for Escalation Control**

Several analysts view the attainment of parity by the superpowers in the strategic area under the aspect of the resulting loss of U.S. escalation dominance. It will be argued that German strategic experts contemplated to compensate this loss by making deliberate escalation with its first use proviso more credible. The implications of an acceptance of flexible options include certain assumptions such as that escalation can be controlled. The instruments of escalation control are limited selective options accomplished by weapons which combine effectiveness with selectivity and flexibility. The discussions within the Nuclear Planning Group will be recalled in order to demonstrate the cooperation between the United States and the European elaboration of selective employment plans. Finally the parallels between deliberate escalation and escalation control shall be clarified.

### **7.2.1. Compensation of the loss of escalation dominance**

The arms race between the superpowers has always been characterised in terms of competing military options rather than by a purely numerical arms race. The superpowers' military competition is expressed in a race for escalation dominance.<sup>23</sup>

---

<sup>22</sup> See U.S. House of Representatives Report, Modernization, 1980, *op.cit.*, p.16

<sup>23</sup> By a comprehensive increase of its nuclear arsenal the Soviet Union obviously accepted this race for escalation dominance and colluded in its advance.

The party which possesses escalation dominance can exclude the other party from exercising influence on the choice between escalation and non-escalation. Herman Kahn was the first to introduce the term escalation dominance to the strategic debate:

"This is a capacity, other things being equal, to enable the side possessing it to enjoy marked advantages in a given region of the escalation ladder...It depends on the net effect of the competing capabilities on the rung being occupied, the estimate by each side of what would happen if the confrontation moved to other rungs, and the means each side has to shift the confrontation to these other rungs."<sup>24</sup>

In his excellent criticism of these escalation concepts, Lawrence Freedman concludes that success through escalation dominance depends on a favourable asymmetry of capabilities.<sup>25</sup> The idea is that this favourable asymmetry might be turned into a bargaining advantage. Escalation dominance occurs for that party which does not have to expect any unbearable damage by escalating to a certain level and which at the same time can expect to inflict considerable military damage on the opponent. Thus, this party could expect that the opponent would have to be interested in avoiding strikes at this specific level of escalation.<sup>26</sup>

As an example of a successful application of escalation dominance, strategic analysts tend to invoke the Cuba Crisis. According to their interpretation, the conflict was decided in favour of the United States, because the Western

---

<sup>24</sup> Herman Kahn, On Escalation. Metaphors and Scenarios, (London: Pall Mall Press, 1965), p.290

<sup>25</sup> Lawrence Freedman, The Evolution of Nuclear Strategy (London and Basingstoke: Macmillan Press, 1981), p.218

<sup>26</sup> "Wer die Eskalationsdominanz besitzt, kann die andere Seite von dem Einfluß auf die Wahl zwischen Eskalation und nicht-Eskalation ausschließen. Eskalationsdominanz entsteht dadurch, daß die betreffende Seite bei einem Übergang auf die Eskalationsebene keinen unannehmbaren Schaden zu befürchten hätte und zugleich wesentliche militärische Vorteile erwarten dürfte mit der Konsequenz, daß die andere Seite einen Schlagabtausch auf der Eskalationsebene unbedingt zu vermeiden suchen muß." ("He who possesses escalation dominance, is able to exclude the other side from influencing the choice between escalation and no escalation. Escalation dominance is achieved when the respective party would have to fear no unacceptable damage and, in addition, could expect important military advantages which therefore would induce the other side under all circumstances to avoid a clash on the escalation level.") Gerhard Wettig, "Die militärischen Optionen in Europa", in Erhard Fromdran / Gert Krell, Kernwaffen im Ost-West-Vergleich. Zur Beurteilung militärischer Potentiale und Fähigkeiten. (Baden-Baden: Nomos, 1984) p.117-155, here p.123

superpower chose a geographical area as the battlefield where it was conventionally superior: the Caribbean Sea. From the outset of the conflict a tactical success for the Soviet Union was excluded by the U.S. geostrategic advantages and its enormous military superiority in this area. While the United States won the conventional battle, its nuclear supremacy would have enabled it to fight a limited nuclear war against military targets in the Soviet Union and simultaneously to keep in reserve enough strategic weapons to destroy Soviet cities. Rühl characterises the situation of 1962: "Die USA hatten sich Eskalationsdominanz in der Krise verschafft und konnten der Soviet Union den Einsatz vorschreiben."<sup>27</sup>

The official justification for the NATO Dual-Track decision, the Soviet SS-20, was perceived as an instrument to secure Soviet escalation dominance and thus as a considerable provocation for NATO.<sup>28</sup>

This loss of U.S. escalation dominance through the superpowers' attainment of parity in the strategic area is much deplored in both the U.S. and the German strategic community. According to Stratmann, this loss of escalation dominance undermined the German security concept which emphasised especially flexible response's principle of deliberate escalation :

"Außerdem gelang es der deutschen Politik mit aktiver Unterstützung der britischen Regierung, in der Formulierung jenes strategischen Kompromisses, zu dem die die allianzinternen Verhandlungen schließlich führten, mit dem Konzept der 'vorbedachten Eskalation' genügend Ansatzpunkte zu bewahren, um auch die neue Doktrin der 'flexible response' im wesentlichen als nukleare Abschreckungsstrategie im Sinne ihrer Vorgängerin darstellen zu können. Dadurch blieb verdeckt, daß das ursprüngliche deutsche Sicherheitskonzept durch den Verlust seiner materiellen Grundlage, der eindeutigen Eskalationsdominanz der USA grundsätzlich in Frage gestellt worden war."<sup>29</sup>

---

<sup>27</sup> "In the crisis, the United States had gained escalation dominance and could determine the stakes for the Soviet Union." Lothar Rühl "Der Nutzen Militärischer Macht in Europa" in Kaiser und Kreis, 1977, op.cit., p.224. "Aus der Eskalationsdominanz folgt auch die Fähigkeit, einen bewaffneten Konflikt zum eigenen relativen Vorteil zu beenden, also dem Gegner die Bedingungen der Kriegsbeendigung vorzuschreiben." ("From escalation dominance follows the ability to terminate an armed conflict on terms as advantageous as possible to one's own interests, and thus to dictate to the opponent the conditions for termination of war.") Rühl, 1987, op.cit., p.63

<sup>28</sup> This is the implied assumption of Rühl's 1987 book, see ibid

<sup>29</sup> Emphasis in the text. "Moreover, German policy, with the help of the British government, succeeded in formulating that strategic compromise at which the allies' negotiations finally arrived, to keep a sufficient number of starting points

According to German analysts this loss of escalation dominance was planned to be compensated by making deliberate escalation with its first use proviso more credible.

### 7.2.2. Assumptions implied in the acceptance of flexible options

The Germans' acceptance of flexible response and the establishing of graded options for implementing the strategy also implied the acceptance of the following assumptions and principles:

- the acceptance of a selective use, which means that the weapons have to be "tailored", "surgical", "flexible", "discriminate" and "targeted";
- the assumption that political and military means are proportional to each other - in the doctrines of limited nuclear options every possible case has to be covered;
- the idea that even in the most cataclysmic circumstances massive destruction can be prevented by means of controlled, flexible, selective and limited use of nuclear weapons is called "escalation control"; escalation control allows the denial of the opponent's military plans and simultaneous avoidance of indiscriminate punishment and retaliation strikes;
- the idea that a nuclear war can be controlled and terminated after it has broken out and that this pause can be used as an incentive to start negotiations with the opponent, the so-called concept of intra-war deterrence. The idea is that the prospect of "terminating the conflict at the lowest possible level consistent with NATO objectives"<sup>30</sup> should still be offered;
- the assumption that escalation control grows into escalation dominance which allows the successful termination of war hostilities on favourable terms.<sup>31</sup>

---

within this concept of 'deliberate escalation' in order to present the new doctrine of 'flexible response' on the whole as nuclear deterrence strategy, just as its predecessor. Thereby it was concealed that the initial German security concept had been fundamentally endangered because it had lost its material basis, namely the unequivocal U.S. escalation dominance". Stratmann, 1981, op.cit., p.16

<sup>30</sup> Legge, 1983, op.cit., p.41

<sup>31</sup> See Senghaas, 1984, op.cit., p.108. Based on an article of Davis, 1975/76, op.cit. and Eckhard Lübke, PD 59 und LRTNF - Modernisierung: Militärstrategische



The rational behaviour of political leaders is the premise underlying the concept that escalation can be controlled. It is the idea that there are limits to the losses political leaders will accept in order to achieve their objectives and that these leaders, aware of the destruction they can inflict upon each other, will be under strong pressure not to trigger such a catastrophe.<sup>32</sup>

Therefore, in short, the controlled use of nuclear weapons would have two specific objectives:

1. to stop the aggression and to create a break in the military activities to allow time for diplomatic negotiations, so that deterrence would then, according to this concept, be restored; and
2. to change the opponent's perception that he might gain a quick and easy victory.<sup>33</sup>

Instruments of escalation control are limited selective nuclear options accomplished by weapons which combine effectiveness with selectivity and flexibility.

During the seventies, the U.S. and West German doctrines were reconciled in their joint elaboration of Selective Employment Plans (SEP) in the Nuclear Planning Group. The NPG's final approval of the use of Theatre Nuclear Strike Forces in a selective and limited release and their first employment in the subsequent NATO exercises can be regarded as the beginning of NATO's establishment for Selective Employment Plans (SEPs) for the limited use of TNF.<sup>34</sup> Apart from the fact that Schmidt participated in the draft of the TNSF employment plans, German acceptance and activity in the elaboration of SEPs during the seventies is expressed in the European request for "clean" and accurate nuclear warheads. Further manifestations of this process are the German approval of first use by targeting military objects. Accordingly, the

---

Implikationen der Erweiterten Abschreckung für die Bundesrepublik Deutschland, (Bonn: Friedrich-Ebert Stiftung, September 1981)

<sup>32</sup> Davis, 1975/76, *op.cit.*, p.7

<sup>33</sup> *ibid.*, pp.6-7

<sup>34</sup> Rühl, 1987, *op.cit.*, p.140 and Legge, 1983, *op.cit.*, p.25

concept of graded options, escalation control and thus intra-war deterrence were also key requests for the guidelines of the German TNF posture.<sup>35</sup>

Ulrich Weisser, who worked in the Planning Staff of the Ministry of Defence and in the chancellery under Helmut Schmidt and Helmut Kohl, describes the LRTNF's role in the context of these escalation concepts as follows:

"Der Bundesrepublik Deutschland würde möglicherweise im Kriegsfall der frühe Einsatz von Nuklearwaffen, die auch die Sowjetunion erreichen können, gelegen kommen, um durch ein weiterreichendes Nuklearsignal das Risiko weiterer Kampfhandlungen für den Warschauer Pakt zu erhöhen, um ihn so zur Einkehr und zur Umkehr zu bewegen - kurzum: die Abschreckung wiederherzustellen."<sup>36</sup>

Weisser expresses the hope that the LRTNF might reestablish deterrence after it failed, in a way that they establish "intra-war deterrence".

### **7.2.3. Parallels between Deliberate Escalation and Escalation control**

According to the U.S. Department of Defense, NATO's first use concept, incorporated in the principle of deliberate escalation, is supposed

"to put more at risk for the Warsaw Pact nations than they would initially expect, should cause them to reconsider their actions by altering their assessment of an early victory, and thus bring about a rapid termination and settlement of the conflict on acceptable terms."<sup>37</sup>

Thus, it is obvious that the aims to be achieved by escalation control and deliberate escalation are identical: both are aimed at breaking the military and political will of the enemy even after the war breaks out. Deliberate escalation and escalation control are distinguished by deliberate escalation's claim to result precisely in a "quick-linkage" or "coupling." Thus, an implementation of

---

<sup>35</sup> Hoffmann, 1986, op.cit., p.161 and Rühl, 1979, op.cit., p.140

<sup>36</sup> "In the event of war, the Federal Republic would probably prefer an early employment of nuclear weapons possessing a range capable of striking the Soviet Union, in order to increase the risk of further hostilities for the Warsaw Pact with this larger-scale (far-reaching) nuclear signal so that it would be induced to stop and turn back and thereby in short, to reestablish deterrence. Ulrich Weisser, Strategie im Umbruch. Europas Sicherheit und die Supermächte, (Herford: Busse Seewald, 1987) p.52. Emphasis by S.P..

<sup>37</sup> Emphasis by S.P., U.S. Department of Defense, Secretary of Defense Donald H. Rumsfeld, Annual Defense Department Report. Fiscal Year 1977, (Washington D.C., January 27, 1976) p.79

the principle of deliberate escalation is the means for "coupling" the European defence with U.S. strategic retaliation.<sup>38</sup> While it is obvious that by the LRTNF deployment flexible response gained an emphasis as an escalatory strategy, and not as a war-fighting one, the question arises why the United States deployed these weapons at all. Ernst-Christoph Meier explains why it was possible for the United States to compromise on this:

"Dieses Eskalationskonzept (Vorbedachte Eskalation, S.P.) soll durch eine Reihe von Eskalationsschritten den Europäern garantieren, daß die USA keinen auf Europa begrenzten Konflikt führen können, indem sowjetisches und damit auch amerikanisches Territorium in einem europäischen Konflikt ausgespart bliebe. Doch dasselbe Eskalationskonzept ermöglicht andererseits den USA die Hoffnung, daß der Konflikt auf unteren Ebenen des Eskalationsspektrums gehalten werden und beendet werden könnte, ohne daß die USA auf strategische Systeme zurückgreifen müssen. Jede Streitkräfteoption unterhalb des strategischen Schlagabtauschs, von den konventionellen Streitkräften bis hin zu den eurostrategischen Systemen, bedeutet für die USA eine Möglichkeit, die Unversehrtheit amerikanischen Territoriums noch etwas länger zu gewährleisten."<sup>39</sup>

Lothar Rühl confirms that the rationale behind the LRTNF was precisely to avert an escalation on to the strategic level of war:

"Doch gerade in dieser Alternative: den strategischen Kernwaffeneinsatz einer allgemeinen nuklearen Erwidern als Antwort auf einen Angriff gegen Westeuropa durch regionale Abschreckungsmittel ausreichender Zielwirkung und Eindringfähigkeit gegen sowjetisches Gebiet zumindest zu verzögern, wenn nicht sogar den USA zu ersparen und in Reserve zu halten, lag die Begründung für eine LRTNF-Modernisierung."<sup>40</sup>

---

<sup>38</sup> There seems to be a consensus in the strategic community that the notion of "coupling" is rather artificial and that doubts are warranted whether the U.S. president "would be more likely to press the button marked 'GLCM (or MRBM) in central Europe' than he would be to press 'Poseidon'." Gregory F. Treverton, "Nuclear Weapons and the 'Gray Area'", *Foreign Affairs*, (Vol.57, No.5, 1979) pp.1075-1089, p.1079. See also Legge, 1983, *op.cit.*, p. 36. For other sources concerning the discussion on "coupling" see also Meier, 1986, *op.cit.*, pp.453-457

<sup>39</sup> "This escalation concept (deliberate escalation, S.P.) was meant to guarantee through a number of steps of escalation that the U.S. could not fight a war which would be confined to Europe, sparing Soviet as well as U.S. territory. But this same escalation concept on the other side enables the U.S. to hope that the conflict could be kept on the lower levels of the escalation spectrum and be terminated without the U.S. having to fall back on strategic systems. Every option of the military forces below the strategic fight, from conventional forces up to Eurostrategic systems, for the U.S. contains the possibility to ensure the intactness of American territory a little longer." Meier, 1986, *op.cit.*, p.277

<sup>40</sup> "However, precisely this alternative was the rationale for the LRTNF modernisation: to delay, if not to spare, the U.S. the employment of strategic nuclear weapons in a general nuclear response to an attack against Western Europe. The intention was to keep the strategic forces in reserve and instead, to provide regional means of

With these statements the difference between deliberate escalation and escalation control is reduced to one of belief or disbelief: it depends on the belief how the Soviet Union interprets an attack with LRTNFs, i.e. whether it reacts with retaliatory strikes against U.S. territory, as always officially announced by the Soviet Union, or whether in the test case of war it prefers to cease hostilities for its own sake.<sup>41</sup> However, the obvious difference between the two concepts is that per definition deliberate escalation implies the first use proviso, escalation control does not.

#### 7.2.4 Dual role of LRTNF

The lack of a definition of the LRTNF's role is due to their "dual role": their tactical as well as their strategic mission.<sup>42</sup> On the one hand they were theatre nuclear weapons and thus assigned to tactical roles, on the other hand they were targeted against the Soviet Union and thus gained strategic character from a Soviet point of view. Helmut Schmidt in particular was strongly opposed to calling them TNF:

"The Americans prefer to call them theater weapons. Why tell the Germans that they are living in a war theater, a ridiculous misnomer, without any psychological feeling for the situation, purely fueling the pacifists?"<sup>43</sup>

Helmut Schmidt preferred the expression "Eurostrategic" weapons.<sup>44</sup> It was also the influence of the Federal Republic which caused them to be renamed as "Intermediate-range Nuclear Forces" (INF) in the late seventies. Thus, any indication of their role was quite cunningly avoided.<sup>45</sup>

---

deterrence with sufficient efficiency and penetration capability against Soviet territory." Rühl, 1987, op.cit., p.173

<sup>41</sup> The Soviet Union repeatedly announced to retaliate against U.S. territory after an attack of any scale, see Senghaas, 1984a, op.cit., p.13

<sup>42</sup> Jochen Denso, Schale ohne Kern- auch die Nachrüstung kann das Dilemma der NATO nicht lösen. (Koblenz: Bernhard und Gräfe, 1983, p.15 and K.-Peter Stratmann, Modernisierung und Dislokierung Nuklearer Waffen in Europa: Mögliche Funktionen vereinbarter Beschränkungen bei der Stabilisierung der Abschreckung.(Ebenhausen: Stiftung Wissenschaft und Politik SWP, SWP-AP 2337, September 1982), p.22,

<sup>43</sup> Interview with Helmut Schmidt, 1984, op.cit., p.92

<sup>44</sup> Brauch reports of 1982 Schmidt interview, Brauch, 1983, op.cit., pp.12-14

<sup>45</sup> Walther Stützle points out the German influence on that issue in Stützle, 1983, op.cit.,p.112

According to the Department of Defense Report to Congress, the role of longer-range theatre nuclear forces is integral to U.S. strategic systems:

"The longer range systems are integrated in targeting with the central strategic forces, many of which are programmed against theater targets. Thus, should their weapons be released, our theater nuclear forces would probably be used in conjunction with regular ground, tactical air, naval, and in many cases strategic forces."<sup>46</sup>

Uwe Nerlich confirms the LRTNF's role as "implementing limited employment options, including those that effectively link SIOP - and NOP capabilities."<sup>47</sup> However, he concedes that it might be very difficult to design such options and to agree on a doctrine on how and under what circumstances to utilise such options.<sup>48</sup> In using the term "limited employment option", Nerlich stresses the strategic role of LRTNF.

U.S. sources suspected that Pershing II and other medium-range weapons would be allocated to strategic missions and incorporated in the newly programmed SIOP-6.<sup>49</sup> They argued that since the Pershing II could not carry out any tactical mission that could not previously have been accomplished by U.S. weapons, the highly accurate and speedy missile could be a valuable adjunct to central strategic forces.<sup>50</sup>

This interpretation of the LRTNF as linking SIOP and NOP and thus supporting the U.S. strategic weapons in their mission is the equivalent to the weapons' function of "coupling" or implementing "extended deterrence." The extension of U.S. nuclear power to guarantee the security of Europe, called selectively "coupling" or "extending deterrence", "nuclear guarantee" and "umbrella", was supposed to be strengthened or reestablished by weapons which blur the distinction between U.S. strategic and NATO theatre nuclear forces:

---

<sup>46</sup> U.S. Department of Defense, Secretary of Defense Harold Brown, Annual Defense Department Report. Fiscal Year 1980 (Washington D.C., January 25, 1979) p.82

<sup>47</sup> Nerlich, 1980, op.cit., p.102

<sup>48</sup> ibid

<sup>49</sup> William Arkin, "Pershing II and U.S. nuclear strategy", The Bulletin of the Atomic Scientists, (June/July, 1983a) p.12-13

<sup>50</sup> Lewis, 1980, op.cit., p.47.

"This makes it more credible that any large-scale conflict in Europe which involves theatre nuclear weapons will escalate to a level where US strategic forces become involved and that limited uses of US strategic forces would be made to cover any gap in NATO forces, because of the limited levels of escalation involved."<sup>51</sup>

This idea corresponds to the "quick-linkage" concept of the German doctrine which regards the TNF's role within "deliberate escalation" as a factor to escalate to the strategic level as quickly as possible.

#### 7.2.5. Compatibility through ambiguous Pershing II data

The U.S. and German politicians' agreement on a common hardware package is also a result of the fact that the Pershing II revealed such an extent of ambiguous data that each national interpretation again was allowed to envisage employment options of the Pershing according to their national first-use and follow-on concepts.

A valid analysis of the new weapons' role is impeded since the question of whether the new LRTNF have been deployed in order to cover new targets has never been sufficiently answered. Walter Slocombe, Principal Deputy Assistant Secretary for International Security Affairs in the Carter administration, confirmed that the inclusion of new targets was not the main issue on which the TNF modernisation was based:

"It is not a question of reaching additional targets...I want to be quite clear. The requirement for TNF modernization is not principally an issue of hitting new targets."<sup>52</sup>

However, this statement did not exclude LRTNF employment against additional targets. The U.S. Arms Control and Disarmament Agency (ACDA) for the Fiscal Year 1983 answers this question unambiguously by explicitly praising the Pershing-II and GLCM for allowing "targeting of previously untargeted hard targets."<sup>53</sup> Major General Niles J. Fulwyler, Director of the

---

<sup>51</sup> Cordesman, 1982, op.cit., p.3

<sup>52</sup> quoted in U.S. House of Representatives Report, Modernization, 1980, op.cit., p.33

<sup>53</sup> U.S. Congress. Arms Control and Disarmament Act (ACDA), Fiscal Year 1983 Arms Control Impact Statements, (Washington D.C.: U.S.G.P.O., March 1982) p.157. In the ACDA statement for the Fiscal Year 1985 this sentence is changed in such a way that the weapon systems are said to allow for "better coverage of some hard targets." U.S. Congress. Arms Control and Disarmament Act (ACDA), Fiscal Year

Army Nuclear and Chemical Directorate, too is quoted by Arkin: he stated that Pershing II would cover critical targets in the Western Military District of the Soviet Union which the United States could not target before.<sup>54</sup> In any case it is a fact that, for the United States, an important factor in the choice of the weapons was certainly their capability to strike hardened targets located behind enemy lines and Soviet second-echelon forces.<sup>55</sup>

The decisively most debatable data of the Pershing was its range: The crucial point is the distance of 2,000 kilometres between the south of the Federal Republic and Moscow. According to the testimony of the Chairman of the Joint Chiefs of Staff, General S. Brown, the most important command, control and communications centres of the Soviet government and armed forces are dispersed and hardened within a 128 kms (80 miles) radius of Moscow.<sup>56</sup> Since the Pershing's officially indicated range is only 1,800 kms, the missile allegedly is not able to reach Moscow.

However, the Pershing's range is quite easily varied in both directions: shorter and longer. Obviously, the intermediate-range Pershing II can be turned into a shorter-range Pershing without too many technological problems, simply by removing one stage.<sup>57</sup> An extension of the range to 1,800 kms does not seem to create a problem either. According to SIPRI, the range of any ballistic missile can be significantly increased by using fuel with a higher energy content per unit.<sup>58</sup>

Even after the withdrawal of the missiles the secret of the Pershing's range will not be revealed. The INF treaty does not list the ranges of the weapons

---

1985 Arms Control Impact Statements, (Washington D.C.: U.S.G.P.O., March 1984), p.113

<sup>54</sup> Arkin, 1983a, op.cit., p.12

<sup>55</sup> At the fourth conference of the "German-American Roundtable" this capability is the first to be mentioned. Fourth German-American Roundtable on NATO: NATO Modernisation and European Security, A Conference Report, Held in Bonn, FRG, December, 12-13, 1980, (Cambridge, Massachusetts: Institute for Foreign Policy Analysis, 1981) p.7

<sup>56</sup> Desmond Ball, "Can Nuclear War Be Controlled", Adelphi Papers, No.169, (London: International Institute for Strategic Studies, 1981), p.44

<sup>57</sup> "Soviets say Pershings Block Pact". Washington Post, (July 24, 1987) p.1

<sup>58</sup> Sverre Lodgaard and Frank Blackaby, "Nuclear Weapons" in SIPRI Yearbook, 1984, op.cit., pp.23-49, here p.35

concerned and merely states: "The range capability of a GLBM not listed in Article III of this Treaty shall be considered to be the maximum range to which it has been tested."<sup>59</sup> Since the range of the Pershing II was not clarified it was left open whether the missiles would be employed for targeting into the depth of the Soviet Union, or just for targeting Moscow with its military and political leadership and command and control systems or, not even to strike the Soviet Union at all, but would merely be employed to target the other Warsaw Pact nations. As will be seen later, these range differences allowed the envisagement of very different options for the employment of the Pershing.<sup>60</sup>

Another troubling question arose in the context of the official number of Pershing II's to be deployed in Europe. The NATO- Communique of 1979 seemed to have avoided any precise specification of the number of Pershing II and speaks of "108 Pershing II launchers, which would replace existing U.S. Pershing I-A, and 464 ground-launched cruise missiles (GLCM), all with single warheads."<sup>61</sup> There was no mentioning of missiles and reloading capabilities, but Lothar Rühl confirmed that there was a consensus among NATO's Foreign and Defence Ministers to deploy "572 missiles for 572 warheads".<sup>62</sup>

In 1982 however, William Arkin, when studying the House Armed Services Committee procurement plan of the FY 1983, discovered the figure of 384 planned Pershing II missiles. The Army generals obviously interpreted NATO's Communique literally and counted launchers instead of missiles.<sup>63</sup> Arkin, searching for the reason why 384 missiles had been ordered, detected the reloading capability of the Pershing II that had been held secret. Major General James Maloney, Chief of Army Research and Development, according to Arkin, told the House Armed Services Committee that "'after a missile is fired it takes about (deleted) to be moved out of that area to go to another area to set up'".<sup>64</sup>

---

<sup>59</sup> A "GLBM" is a Ground-launched Ballistic Missile, according to the treaty. INF Treaty, 1987, *op.cit.*, p.6

<sup>60</sup> Such an ambiguity of range is to a certain degree applicable to all ballistic missiles.

<sup>61</sup> Communique, in Cartwright/Critchley, 1985, *op.cit.*, p.152

<sup>62</sup> "572 Flugkörper für 572 Gefechtsköpfe" Rühl, 1980, *op.cit.*, p.99

<sup>63</sup> "Das falsche Spiel mit den Raketen", in *Der Stern*, (Vol.35, No.42, October 1982) pp.274-277

<sup>64</sup> Arkin, 1983a, *op.cit.*, p.12



Thus, the figure at stake doubled from 186 to 372 missiles, close to the 384 Arkin searched for. In October 1982, Arkin launched his results in the German magazine "Stern"<sup>65</sup>, which prompted Defence Minister Manfred Wörner and Chancellor Kohl to visit Washington in late November 1982 and to declare that they were strongly opposed to the reloading plans. In November 1982, Wörner and Kohl received a clear message that the United States would not deploy reloads.<sup>66</sup>

According to the data given in the INF Treaty, the West German government had succeeded in turning down the U.S. plans to reload the Pershing's missiles. The number of deployed and non-deployed Pershing missiles is indicated with 247 missiles. Thus 139 missiles additional to the announced 108 Pershing II missiles turned up. The number of 139 extra missiles can be regarded as being within the limits of the number of necessary spare missiles.<sup>67</sup>

As already pointed out in the discussion of the High Level Group, the intended objective of the LRTNF's modernisation was to prevent the impression that NATO was building up a war-fighting capability on an Eurostrategic level. Therefore, the Germans could not accept the reloading capability of the Pershing and thus the doubling of the number of the systems to be deployed on German soil. On the other hand, it is possible that military men, who preferred war-fighting concepts, did not object to the deployment programme because of their knowledge about the Pershing's reloading capability.

### **7.3. Conclusion: Blurring of Traditional Categories**

This proximity of the U.S. and German national strategies is derived from the fact, as explained above, that any deterrence theory inevitably implies the anticipation of a war as well as the preparation to fight it. Thus, the cherished distinction between politicians who are more concerned with deterrence or

---

<sup>65</sup> "Das falsche Spiel mit den Raketen", in Der Stern, (Vol.35, No.42, October 1982) pp.274-277

<sup>66</sup> Lodgaard, 1984, *op.cit.*, p.35

<sup>67</sup> See Memorandum of Understanding Regarding the Establishment of the Data Base for the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of their Intermediate-Range and Shorter-Range Missiles. December 8, 1987.

those who stress the war-fighting aspect of deterrence is hardly explanatory any more.<sup>68</sup> This also applies to the distinction commonly made between European strategic analysts, who are more concerned with deterrence, and the U.S. defence experts, who regard nuclear weapons as a means to fight the war.<sup>69</sup>

The fact that German strategic analysts and politicians approved the principles inherent in escalation control, contributes to the phenomenon that U.S. and German attitudes are not that distinct from each other any more. The categorisation of U.S. analysts as being "war-fighters" is based on their preference for battlefield scenarios in Europe. German analysts tend to give the impression that above all they are concerned with deterrence and should deterrence fail, with the termination of war. However, as will be demonstrated at the end of the analysis, precisely these German analysts and politicians campaigned for the idea of a limited nuclear war with the inclusion of Soviet territory and also demanded the hardware enabling them to fight this war. Thus, any criticism has to be distributed equally between both nations' analysts. However, the criticism of the peace movement concentrated on the United States; this was due to its status as a superpower and its claims to be a leading power in the world. In view of the assurances of German politicians that, whatever they would do in the nuclear field, they would either be concerned to strengthen the FRG's coupling to the U.S. nuclear umbrella, or try to achieve some success in arms control, the peace movement was induced to identify the

---

<sup>68</sup> For example, it is perfectly justified to present convincingly Helmut Schmidt as the war-fighter and Franz-Josef Strauß as the true deterrer. See the Strauß supporter Thomas Enders, 1984, op.cit.

<sup>69</sup> One example of a typical characterisation of the German and U.S. attitude towards deterrence in the self-image of the strategic community: "Der grundlegende Unterschied im strategischen Denken der Amerikaner und der europäischen Bündnispartner läßt sich vielleicht auf folgende Formel bringen: die Amerikaner neigen dazu, stark in den Kategorien der technologischen Führbarkeit und Begrenzbarkeit eines nuklearen Krieges auf militärische Ziele zu denken, und halten die nukleare Drohung deshalb für glaubwürdig; für die Europäer jedoch kann eine glaubwürdige Abschreckungsdrohung nicht direkt und massiv genug gegen die Sowjetunion gerichtet sein." ("The basic difference in the strategic thinking between the U.S. and its European allies might be reduced to the following formula: Americans tend to think very much in terms of the technological possibility of fighting and limiting a nuclear war and therefore consider the nuclear threat to be credible; for the Europeans, however, a credible threat of deterrence cannot be directed against the Soviet Union in too direct and massive a way." Klaus-Dieter Schwarz, William R. Van Cleave, "Die Theorie der Abschreckung", in Klaus-Dieter Schwarz, (ed.) Sicherheitspolitik. Analysen zur politischen und militärischen Sicherheit (Bad Honnef-Erpel: Osang Verlag, September 1978 (3. Edition)) p.131-149, here p.135

U.S. as the main promoters of these scenarios of a limited war in Europe and therefore did not criticise German politicians in any sense. This debate on a limited war in Europe was rather more a reaction to the sabre-rattling remarks of the Reagan administration as well as to the internationally tense situation than an accurate analysis of the underlying strategies.

Public statements of German politicians on the necessity to get used to the notion of limited war in Europe further undermine this impression of the innocent German deterrers. Without saying precisely which geographical area he had thought of, the deputy spokesman of the Federal government, Lothar Rühl, defended the notion of a "limited war" as an acceptable option for the Federal Republic. During the same period in which Reagan's provocative statement caused an uproar in Europe, he assured the public that a selective employment of tactical weapons would neither destroy the Federal Republic at once nor completely; it would be worthwhile to try and maintain as much territory as possible. Rühl explained to the German public that flexible response would not aim at immediately leaping into an all-out nuclear war, but to take a pause and to limit the use of nuclear weapons with respect to geography, time and number. He concedes that these considerations are difficult to comprehend for a European, and in particular for a German. According to him, it is still worthwhile because of the plausible threat to escalate:

"die Zerstörung von Land und Leuten so weit zu begrenzen, wie es überhaupt möglich ist, um die biologische Substanz der betroffenen Völker und damit ihre Fähigkeiten zum Überleben in der Geschichte überhaupt zu erhalten."<sup>70</sup>

These remarks by the ex-spokesman of the Social Democratic government resemble the conclusions of Colin S. Gray and Keith Payne, who, in their famous article "Victory is possible", recommend a combination of an intelligent offensive strategy with homeland defence, in order "to reduce U.S. casualties to approximately 20 million, which should render U.S. strategic threats more credible", and which would be a "level compatible with national survival and recovery."<sup>71</sup>

---

<sup>70</sup> "to limit the destruction of the territory and the people to the utmost extent in order to maintain the biological substance of the nations concerned and thus their ability to maintain their own survival in history." Extracts from an interview of the government's spokesman Lothar Rühl with the Norddeutsche Rundfunk in a radio broadcast programme "Streitkräfte und Strategien", published in Frankfurter Rundschau, (September 15, 1981), p.2

<sup>71</sup> Gray/Payne, 1980, op.cit., p.25

These remarks correspond to Rühl's general attitude towards war. When he reflects on the utility of military force in Europe, he recapitulates :

"Der Krieg an sich ist nicht sinnlos, wie die Beispiele Vietnam und Indien, aber auch der Krieg im Nahen Osten zeigen. Sinnlos ist nur der Krieg, der weder eine Entscheidung bringt noch Zeit gewinnt, oder der Krieg, der einen unverhältnismäßigen Preis für den gewünschten Erfolg verlangt."<sup>72</sup>

---

<sup>72</sup> "War as such is not without purpose, as has been demonstrated by the examples of Vietnam and India as well as by the war in the Middle East. Only then is a war futile if it neither provides a decision nor a gain of time, or when a war demands a disproportionately high price in order to obtain the desired success.", Rühl in Kaiser et.al., 1977, *op.cit.*, p.264

## 8. The LRTNF decision as a result of U.S. doctrines

### 8.1. Pershing II and Cruise Missile: spearheads of a first strike strategy?

The argument that Pershing II and cruise missiles are first strike weapons and thus an indispensable element of a new U.S. strategy to fight and win a nuclear war with the Soviet Union from European soil, played a central role in the peace movement.<sup>1</sup> In particular the Pershing II, possessing an accurate low-yield warhead, short pre-attack warning time and high penetration capability seemed to be the perfect means to implement the U.S. first strike strategy by destroying Soviet strategic forces and Command, Control, Communications and Intelligence systems from Central Europe. Therefore, the peace movement<sup>2</sup>, at least partly, regarded them as spearheads of a new war-fighting strategy and the first available elements of a U.S. partly-disarming or even completely disarming first strike capability.<sup>3</sup> Without this argument it would not have been possible to mobilise so many supporters against the nuclear weapons.<sup>4</sup>

#### 8.1.1. The Political Background

The alleged "paranoid conclusions" of the German peace movement were justified for many by Colin S. Gray and Keith Payne's legendary 1980 article "Victory is Possible" which is famed for its notion of nuclear victory. The authors recommend a combination of counteroffensive targeting, civil defence, and ballistic missile and air defence.<sup>5</sup>

<sup>1</sup> Senghaas, 1984a, op.cit., p.1

<sup>2</sup> For a very detailed analysis of the German peace movement see, Ulrike C. Wasmuht, Friedensbewegungen der 80er Jahre. Zur Analyse ihrer strukturellen und aktuellen Entstehungsbedingungen in der Bundesrepublik Deutschland und den Vereinigten Staaten von Amerika, (Gießen: Focus-Verlag, 1987), here p.116

<sup>3</sup> A first strike is defined as "a preemptive disarming nuclear strike aimed at eliminating as completely as possible the entire strategic potential of the adversary." Kaiser et.al., 1982, op.cit., p.1158. For a detailed discussion of the "counterforce" and "first strike" strategy, see chapter 2.2.1.

<sup>4</sup> Senghaas, 1984a, op.cit., p.1

<sup>5</sup> Gray/Payne, 1980, op.cit., p.25

During the summer of 1982 public discussion was fuelled by press leaks of Pentagon plans to fight a protracted nuclear war in Europe. The New York Times published extracts from a Pentagon defence guide on a 5 year overall plan in which it was announced that "the armed forces are ordered to prepare for nuclear counterattacks against the Soviet Union 'over a protracted period'."<sup>6</sup> The future nuclear war strategy would be based on "decapitation, meaning strikes at Soviet political and military leadership and communications lines."<sup>7</sup> These "decapitation" strikes were the concrete realisation of the peace movement's dreaded visions.

The peace movement's conjured up scenarios of a disarming first strike, to be accomplished by the newly deployed U.S. missiles, in combination with the Reagan administration's bellicose statements and offensive defence plans, which were responsible for an internationally tense situation in the early eighties.<sup>8</sup> These apprehensions of the peace movement did not result from an analysis of the U.S. strategic intentions but from conclusions drawn from the weapons' technical capabilities and the end of detente in the beginning of the eighties.

Another scenario which played an important role in the discussion of the peace movement was the notion of a limited war. For a considerable part of the peace movement it was a revelation that U.S. strategy had always implied the possibility of limited and selective use of nuclear weapons, even exclusively on the European theatre. Also new, and certainly not only to the peace movement, was the idea that the termination of such a war could give rise to a "winner".<sup>9</sup>

At the beginning of the eighties, the Iranian revolution caused a deterioration of the international situation which fed Western anxieties that the Strait of Hormuz could be blocked in time of crisis. This situation provided an excellent background for all kinds of war scenarios involving the superpowers which did not overly strain belief. One famous war scenario runs as follows: Khomeini

---

<sup>6</sup> "Pentagon Draws Up First Strategy For Fighting a Long Nuclear War", NYT, May 30, 1982, p.1

<sup>7</sup> ibid, p.2

<sup>8</sup> Gumbert / Stuckenbrock, 1983, op.cit., p.10

<sup>9</sup> see Wasmuht, 1987, op.cit., pp.118-119

dies, the Tudeh party controls the situation and calls for help from the Soviet Union. Since the Soviet Union possesses an easy approach to the Gulf through Afghanistan, Soviet forces within a few could arrive days at the Strait of Hormuz, the Achilles heel of Japan, Western Europe and the United States.<sup>10</sup> The fear of Soviet control over the --in respect to the West--indispensable oil sources found its military expression in the so-called "Brown Doctrine" of U.S. Secretary of Defense Harold Brown, which declared that the United States will choose "the terrain and the tactics where the war with the Soviets about oil will take place."<sup>11</sup> With this threat of a geographical extension of a war with the Soviet Union, wherever it might break out, Western Europe was directly coupled to areas of crisis such as the Near and Middle East. In such a crisis scenario, the Pershing II is seen as a means to intimidate the Soviet Union:

"Sie (die Pershing 2, S.P.) ist das Produkt des schimärischen und doch auf einmal allzu greifbaren Wunsches, der anderen Supermacht einen begrenzten atomaren Einsatz weit glaubhafter als bisher androhen zu können."<sup>12</sup>

This criticism took on a concrete form when President Reagan confirmed that a nuclear war limited to Europe was not beyond phantasy and that he could envisage a situation "where you could have the exchange of tactical (nuclear) weapons against troops in the field without it bringing either one of the major powers to pushing the button"<sup>13</sup>. Also Reagan's idea of a joke during a voice test in August 1984 provoked anxiety in Europe that Reagan did not take war-prevention too seriously:

"My fellow Americans, I'm pleased to tell you today that I've signed legislation that would outlaw Russia forever. We begin bombing in five minutes."<sup>14</sup>

---

<sup>10</sup> For this scenario see Bittorf, 1981, *op.cit.*, p.84-92

<sup>11</sup> "Brown Warns That a Persian Gulf War Could Spread", in *NYT*, February 15, 1980, p.A3. With the Brown doctrine emerged the term "Horizontal escalation", i.e. a "deterrence policy to inhibit a state exploiting temporary or regional advantage by making it clear it will suffer costs elsewhere, and that it should not think itself immune outside the local arena of conflict." Michael Sheenan and James H. Wyllie, *The Economist Pocket guide to Defence*, (Oxford and London: Backwell and The Economist, 1986), p.116

<sup>12</sup> "It (the Pershing II, S.P.) is a product of the chimerical, but suddenly very tangible, wish to threaten the other superpower with a limited nuclear employment much more plausibly than before." Bittorf, 1981, *op.cit.*, p.69

<sup>13</sup> *The Times*, November 6, 1981, p.1

<sup>14</sup> *Der Spiegel*, (Vol.38, No.34, August 20, 1984), p.77

### 8.1.2. Characteristics of First Strike Weapons

The question as to whether and to what extent the new missiles show the characteristics of first strike weapons was a feasible approach to indicating the role and function of the Pershing II and cruise missiles. One must distinguish between the build-up of a comprehensive first strike capability and a single weapon system with first strike characteristics.

Peace researchers and the peace movement searched for the missiles' origin in U.S. strategy and debated

1. whether the Pentagon planned to build-up a decapitation or disarming first strike capability and
2. whether the missiles exhibited characteristics of first strike weapons.

Even proponents of the LRTNF deployment acknowledged that the Pershing II's ability to reach Soviet command centres and intercontinental ballistic missiles in an interval of a few minutes might make it easily perceived by the Soviets as a first strike weapon.<sup>15</sup>

The cruise missile was treated like a stepchild in the analysis of the new weapons' role because it needed several hours to reach targets in the Soviet Union. At first sight the cruise missile does not seem to fulfil the requirement for weapons assigned to a counterforce strategy because it is ineffective against time-urgent targets such as the silos of intercontinental missiles. However, the employment of the cruise missile would be useful in certain situations: First, it could be used against reloadable silos. Its second and more decisive capacity would be to compensate the effects of "fratricide". In case one target is cross-targeted by several warheads, fratricide describes the phenomenon where one nuclear explosion destroys other incoming warheads; this is caused by the effects of the electromagnetic radiation from a nuclear explosion, called Electromagnetic Pulse (EMP)<sup>16</sup>:

"Say, for instance, that the first warhead explodes too far away to cause damage. But it kicks up debris and ionizes the atmosphere so that the next

---

<sup>15</sup> Denso, 1983, *op.cit.*, p.134

<sup>16</sup> For an explanation of the EMP see the Glossary



warhead is destroyed by flying objects or has its fuzing circuit burned out by a tremendously high electromagnetic pulse generated in the circuitry."<sup>17</sup>

After the fratricide effects have been diffused, cruise missiles with their slow and deep flight have a much higher realistic chance than ballistic and speedy weapons to hit the Soviet ICBMs, which are themselves blocked for a while in their silos by the effect of the EMP.<sup>18</sup>

Mechtersheimer stipulates four technical prerequisites for missiles which are supposed to have a first strike capability:

1. high accuracy and high explosive power, in order to destroy the missile silos and C<sup>3</sup>I systems
2. a "necessary" range,
3. high penetration capability against ABM systems, and
4. a sufficient number, calculated with a view to multiple covering of the most important targets.

All four prerequisites have to be fulfilled in order that we can speak of a first strike capability. While comparing the new missiles' characteristics with these criteria, Mechtersheimer, Director of the Starnberg Peace Research Institute and member of the Bundestag, concludes:

"Unter den vorgesehenen Stationierungsbedingungen handelt es sich bei der Pershing II um keine Erstschlagwaffe."<sup>19</sup>

The Pershing fails to meet two criteria:

---

<sup>17</sup> Aldridge, 1983, *op.cit.*, p.61.

<sup>18</sup> Robert C. Aldridge, Erstschiag! Die Strategie des Pentagon für den Atomkrieg, (München: Werkhaus-Verlag, 1984) pp.320-321. The German edition is followed by a chapter, "Euromissiles" which analyses the Pershing II and ground-launched cruise missiles' role in the first strike strategy. The fact that it is not contained in the original U.S. edition is a further indication of the subsequent overemphasis given to Eurostrategic weapons in these first strike scenarios.

<sup>19</sup> "In consideration of the planned deployment modus, the Pershing II is not a first strike weapon." Alfred Mechtersheimer, "Ist die Pershing II eine Erstschiagwaffe oder nicht?" in Mediatus, Special Issue, (February 1984a), p.5

1. with a range of 1,800 kms the missile is only able to hit 10% of the Soviet land-based strategic forces<sup>20</sup> and
2. the number of 108 missiles is not even sufficient to destroy those ICBMs which are deployed west of the Urals.<sup>21</sup>

Mechtersheimer concedes that any weapon which is potentially usable within a first strike strategy could be called a "first strike weapon". In view of rapid technological development this label could be applied to any new weapon. However, an inflationary use of this term would blur the decisive difference between an available and unavailable first strike capability.

Dieter S. Lutz, Deputy Director of the Institute for Security and Peace Research in Hamburg, completes the list of criteria for first strike weapons with the missiles' short warning time. In accordance with the majority of the peace researchers, he concludes that the new missiles do not produce a first strike capability.<sup>22</sup>

Lutz, however, suspects that, in view of the new developments in nuclear technology, the new missiles have to be perceived as part of a future first strike capability. Suspicion is warranted that the LRTNF can be used as first strike weapons in a partly disarming first strike strategy. Thus, Lutz concludes, they may contribute to the threat of an "unintended world war"<sup>23</sup>.

---

<sup>20</sup> Arkin, 1983a, op.cit., p.12

<sup>21</sup> Mechtersheimer, 1984, op.cit., p.5

<sup>22</sup> Dieter S. Lutz, "Genfer Perspektiven-ein Weltkrieg wider Willen" in Frankfurter Rundschau (August 22, 1983) p.12. While stressing the small number of 572 systems in particular, Gert Krell and Hans-Joachim Schmidt reach the same conclusion. Krell / Schmidt, 1982, op.cit., p.43

<sup>23</sup> "Sieht man es allerdings im Verbund der qualitativen und quantitativen Entwicklungen der USA und ihrer NATO-Partner im nuklear- und raketentechnologischen Bereich insgesamt, so muß es als Teil einer sich heute schon abzeichnenden künftigen Erstschlagsfähigkeit begriffen werden. Darüber hinaus ist zu befürchten, daß die 'Nachrüstungswaffen' als Erstschlagpotential bereits im Sinne eines Teilentwaffnungsschlages Verwendung finden können und somit zur Gefahr eines 'Weltkriegs wider Willen' beitragen." ("However, if one sees it in an overall context of qualitative as well as quantitative developments in the field of nuclear and missile technology within the U.S. and its NATO partners, one has to understand it as part of a future first strike capability which is in the offing. Moreover, one has to fear that the LRTNF will already be used as first use potential in the sense of a partly disarming strike and thereby can contribute toward an 'unintended world war'.") Lutz, 1983, op.cit., p.12

### 8.1.3. The scenario of a disarming first strike

By assuming that "good old deterrence"<sup>24</sup> had been abandoned and by its interpretation of a supposedly new U.S. doctrine on fighting and winning a nuclear war, the peace movement revealed a rather restricted perspective on nuclear history. Some peace researchers had contributed to this shortsighted perception of U.S. strategy by omitting to point out the link between these new developments and the evolution of the U.S. strategy. Thus, an overemphasis of the new weapons' importance was inevitable. For example, Alfred Mechttersheimer speaks of a "collapse of deterrence" and concludes:

"Die Abschreckung wird auf einer vollkommen neuen Grundlage aufgebaut: nämlich der Fähigkeit, einen Nuklearkrieg zu gewinnen! Das ist die neue, besonders für Europa und die Bundesrepublik gefährliche Strategie der Kriegsführungs-Abschreckung."<sup>25</sup>

In his famous book First Strike! The Pentagon's Strategy for Nuclear War, Robert C. Aldridge, a Polaris and Trident missile design engineer at Lockheed, argued strongly in favour of the view that the United States had been rapidly approaching a disarming first strike capability which "certainly doesn't project into the latter 1980s because that is when today's emerging technologies will start becoming operational."<sup>26</sup> This strategy would be implemented by weapons with a high accuracy and penetration capability such as the Trident submarine, the MX, penetrating bombers and cruise missiles as well as by intensifying anti-submarine and satellite warfare.

Furthermore, some German peace researchers analysed the role of the new LRTNF in the context of a U.S. policy of pursuing the strategy of a disarming first strike. Ulrich Albrecht, who basically sees the new weapons' origin in the U.S. Military Industrial Complex, noted the beginning of a new epoch enabling the superpowers to knock each other down with one disarming first strike.

---

<sup>24</sup> Senghaas, 1984a, op.cit., p.1

<sup>25</sup> "Deterrence is built up on a completely new basis: that is, the capability of winning a nuclear war! This is the new strategy of war-fighting deterrence which is particularly dangerous for Europe and the Federal Republic." Alfred Mechttersheimer, Zeitbombe NATO. Auswirkungen der neuen Strategien, (Köln: Eugen Diederichs Verlag, 1984) p.14, emphasis in the text

<sup>26</sup> Aldridge, 1983, op.cit., p.40

With the highest accuracy of all the nuclear weapons available, the Pershing II is supposed to play the most important part in this scenario:

"Offenbar steht die Welt davor, ins sogenannte 'Erstschlagzeitalter' einzutreten. Damit ist die die Strategen faszinierende Möglichkeit gemeint, durch einen großen, die Gegenseite entwaffnenden Schlag Herr der politischen Situation zu werden...Offenbar bewegen wir uns auf dieses 'Erstschlagzeitalter' zu. Die Rakete Pershing II ist der Pionier der Generation von Waffen, die dieses Zeitalter ermöglichen. Sie ist jene Punktwaaffe, die die Silos feindlicher Raketen entweder zerstört oder aber mit ihrer Explosionskraft verschüttet."<sup>27</sup>

However, it can not be denied that also this kind of wishful thinking comprises U.S. strategic thinking, as the ambitious SDI project suggests.

Encouraged by John Steinbruner's analysis that the Soviet Union only needed to hit 50 to 100 weapons in order to knock out the U.S. strategic nuclear forces<sup>28</sup>, Karl D. Bredthauer, editor of the authoritative periodical Blätter für deutsche und internationale Politik, affirmed:

"Mit einer einsatzbereiten Zahl 'punktzielgenauer' Atomraketen in der Größenordnung von 100 wäre also technisch - zunächst rein rechnerisch gesehen - ein 'Enthauptungsschlag' von 'chirurgischer' Präzision durchführbar... Wenn die Pershing II-Rakete für diese Mission in Frage kommt, wird die neue Situation bei fristgemäßer Dislozierung der vorgesehenen 108 Abschußgestelle - unabhängig von der Frage der Nachladbarkeit dieser Abschußgestelle und von der Rolle der übrigen fast 9.000 strategischen Atomwaffen - 1985/1986 eintreten."<sup>29</sup>

---

<sup>27</sup> "Obviously the world is about to enter into the so-called 'first strike age'. This refers to the possibility of dominating the political situation by a big strike which disarms the opponent, which fascinates the strategists...Obviously we are moving towards this 'first strike age'. The Pershing II is the pioneer of a generation of weapons which render this age possible. It is the accurate weapon which either destroys the opponents' silos or buries them with its explosive power." Albrecht, 1982, op.cit., p.17. The same reproach can be applied to Guha's book, 1980, op.cit.

<sup>28</sup> John D. Steinbruner, "Nuclear Decapitation", Foreign Policy, No.45, (Winter 1981/82) p.16-28

<sup>29</sup> "With 108 operational and accurate nuclear missiles it would be technically feasible - primarily from a purely arithmetical point of view - to execute a decapitation strike of surgical precision...If Pershing II proves suitable for this mission and the deployment deadline of the planned 108 launchers will be met, - disregarding the question of their reloading capability or the role of the remaining almost 9,000 strategic nuclear weapons -, this new situation will arise in 1985/1986." Karl D. Bredthauer, "'Enthauptung' als 'Grundlage' der Nuklearstrategie", in Frankfurter Hefte, (Vol.39, No.7, 1984) p.13-22, here p.19

Several peace researchers -- although they did not deny the Reagan administration's obvious political ambition to knock down the Soviet Union -- doubted the technical capability of the U.S. armament industry to implement these plans.<sup>30</sup>

Even Colin S. Gray and Keith Payne - although with evident regret - had to concede the limits to these scenarios of nuclear victory:

"(I)t would not be in the interest of the United States actually to implement an offensive nuclear strategy no matter how frightening in Soviet perspective, if the U.S. homeland were totally naked to Soviet retaliation."<sup>31</sup>

As a remedy to this dilemma, Gray, in accordance with an influential camp of U.S. strategic analysts, recommends "both counterforce action and active and passive defenses"<sup>32</sup>, an idea which took shape in Reagan's Strategic Defense Initiative. To many, however, the exotic space-based systems upon which the plan depends are simply unlikely to function, at least in this century. Until SDI functions and guarantees that a Soviet missile could not find its way to the United States, any kind of attempt to develop a disarming first strike capability in order to knock down the Soviet Union is absolutely suicidal and condemned to fail. Another way of arguing against the hypothesis of the U.S. intention is to recall the technically unperfected state of the Pershing II.

Pershing called for six test flights to be conducted at the White Sands Missile Range in 1977 and 1978. Only five missiles were flown. According to the Army the Pershing had achieved its objectives because the fifth test shot hit within

---

<sup>30</sup> Reimar Stuckenbrock complained that the debate was dominated by speculations concerning the weapons' technical capabilities instead of an analysis of political objectives. Reimar Stuckenbrock, "Die Fata Morgana des Enthauptungsschlages: eine Gefahr, die nicht existiert", in: Frankfurter Hefte, (Vol.39, No.7, 1984) p.22-31. For a Soviet view see an interview of Karl D. Bredthauer with the Deputy Director of the U.S. Institute in Moscow, Prof. Radomir Bogdanow, "Worin besteht die Gefahr für Europa und wie kann man die abwenden? Einschätzungen aus amerikanischer Sicht. Radomir Bogdanow und Daniel Ellsberg im Gespräch mit Karl D. Bredthauer," in Blätter für internationale Politik, Vol.28, No.6, (1983) pp. 776-795

<sup>31</sup> Gray and Payne, 1980, op.cit., p.24

<sup>32</sup> Colin S. Gray, "Nuclear Strategy: the Case for a Theory of Victory" in Steven E. Miller (ed.), Strategy and Nuclear Deterrence. (Princeton, New Jersey: Princeton University Press, 1984) p.23-57, here p.53

25 m of the desired impact point.<sup>33</sup> Aldridge has a different estimate of the success of the test flights: 4 of 5 tests were failures, the successful missile could only hit its target because an aluminium reflector of 2 m was used as an approach radar.<sup>34</sup>

The compression of the schedule for the Pershing's technical development, particularly considering its deficiencies, suggests that the main U.S. decision-makers wanted to avoid the risk of a possible postponement of the Pershing's deployment in Europe from the outset of the decision in order to pursue full scale development.

In December 1978 the DASRC recommended Full-Scale Engineering and Development of the Pershing II. The Pershing's deployment should begin 56 or 57 months from the awarding of the contract to Martin Marietta in February 1979, i.e. in December 1983. However, this meant an 18-month compression of the normal Defense Department full development cycle. The schedule of the first deployment of the Pershing II at the end of full scale development could only mean that initial production and final development were overlapping.<sup>35</sup> The ignorance in regard to the failure of the test flights corresponds to the general hustle of the Pershing's development.<sup>36</sup> 28 Pershing II flights were planned between April 1982 and August 1983. This implied an already tight schedule because 4 months previous to the actual deployment corrections could no longer be incorporated in a deployment schedule for December 1983. The number of test flights was reduced to 18 and the first test flight was postponed from April to July 1982, i.e. one month after the production decision of June 1982.

---

<sup>33</sup> F. Clifton Berry Jr., "Pershing II. First Step in NATO Theatre Nuclear Force Modernization?", International Defense Review, (No.8, 1979), pp.1303-1308, here p.1305

<sup>34</sup> Aldridge, 1984, op.cit., p.30

<sup>35</sup> Berry, 1979, op.cit., p.1304

<sup>36</sup> For the Army's clever dealing with U.S. Secretary of Defense see also Strobe Talbott, Raketenschach. Ein Bericht, der offenlegt, wie persönliche Konflikte und Machtkämpfe im Weißen Haus die amerikanische Politik beeinflussen und so die gefährliche Krise in den amerikanisch-sowjetischen Beziehungen ausgelöst haben. (München, Zürich: Piper, 1984), p.263

On July 22, 1982 the first Pershing II was launched from Cape Canaveral. 17 seconds later it exploded. In November 1982 the second missile missed its target by 6,5 kilometres although once again aluminium was used as an approach radar. In December 1982, as a result of these failures, Congress held back the money for the production, but again, in spite of protest from members of the House Appropriations Defense Subcommittee, released the funds in May 1983. Only one of the test flights No. 13,14,15, and 16 was successful. Flights 17 and 18 started under easier conditions and finally succeeded.<sup>37</sup>

The deployment of a technically unperfected weapon, just to keep the schedule, can only be explained by political motives. The interpretation that the U.S. and West German politicians decided to deploy on schedule in order to avoid giving the impression that the peace movement had even partially succeeded, no longer sounds exotic in view of the Pershing's inefficiency.<sup>38</sup> Most of all, the Pershing's technical inefficiency reveals how far away the United States still is from achieving an effective disarming first strike capability. Thus, the argument that the Pershing II and cruise missile are indispensable elements of a U.S. first strike strategy has been disproved. The U.S. administration's motives for developing the Pershing II and cruise missile cannot be explained in terms of the pursuit of this strategy.

---

<sup>37</sup> Aldridge, 1984, *op.cit.*, pp.301-302 and Cochran, 1984, *op.cit.*, p.295

<sup>38</sup> For this interpretation see Ulrich Simon: "Daß ein nüchtern-rationales Abwägen der politisch-militärischen Vor- und Nachteile des INF-Programms heute praktisch nicht mehr möglich ist, verdanken wir hingegen weitgehend der emotionalen Aufladung der Thematik durch die 'Friedensbewegung', deren Wirken so gesehen unselig war. An einer Durchführung des INF-Programms führt heute kein Weg mehr vorbei, wie immer man den militärischen Nutzen dieser Waffen veranschlagen will." ("That today a sober and rational evaluation of the political-military advantages and disadvantages of the INF programme is practically no longer possible, is due to the emotional climate surrounding the subject which was created by the 'peace movement', whose effect, in this respect, was counter-productive.") Ulrich Simon, "Nukleare Mittelstreckenwaffen und Erweiterte Abschreckung. Politisch-psychologische Hintergründe und militärischer Stellenwert des NATO-Rüstungsprogramms", *Politische Vierteljahresschrift*, (Vol.26, No.3, 1985) p.227-246

## 8.2. Schlesinger's Doctrine of Limited Nuclear Options

Since the Pershing II and the Cruise Missile are U.S. weapons, their origin in the strategic planning of the Pentagon has to be identified. The question arises whether and to what extent the Pershing II and the Cruise Missile were a result of an emphasis on counterforce options and limited nuclear options within U.S. strategic policy.

The weapons' origin is identified very differently by various analyses which deal with the history of the NATO Dual-Track decision. Their results may be correlated with the views of the camp with which they can be associated. While proponents of the missile programme like Hubertus Hoffmann and Lothar Rühl stress the weapons' evolution in the Nuclear Planning Group and honour the Federal Republic's role as a successful proponent<sup>39</sup>, peace researchers associated with the peace movement tend to emphasise the needs of the U.S. counterforce strategy for this kind of weapons. Peace researchers also included the U.S. Military-Industrial Complex in their analyses as creating an artificial need for any kind of new weapons and military technology.<sup>40</sup>

The assumption that the Pershing II and ground-launched cruise missile are an indispensable element of Schlesinger's counterforce doctrine will be analysed in this chapter. The answer to the question whether the Pershing II and GLCM were induced by the change in the U.S. strategy is twofold: The comprehensive revision of nuclear war planning and the resulting emphasis on flexibility and selectivity certainly influenced and subsequently incorporated the employment plans for the TNF in Europe.<sup>41</sup> Thus, the characteristics of low yield and accuracy are definitely required by the U.S. counterforce strategy. But Schlesinger did not have any Long Range Theater Nuclear Forces (LRTNF) in mind.<sup>42</sup> The extension of the range, as will be seen later, was an answer to requests from West Germany and SACEUR, but not from requests generated

---

<sup>39</sup> Hoffmann, 1986, op.cit., and Rühl, 1987, op.cit.

<sup>40</sup> For this approach, see Albrecht, 1982, op.cit.

<sup>41</sup> Hoffmann, 1986, op.cit., p.110

<sup>42</sup> see also Rühl, 1987, op.cit., p.99. For a detailed criticism of the counterforce strategy see Gert Krell, "Rüstungswettlauf: Verteidigung oder Eigendynamik? Zur Kritik der amerikanischen Nuklearstrategie." in Friedensanalysen. Für Theorie und Praxis 2. Schwerpunkt: Rüstung. (Frankfurt am Main: Suhrkamp Verlag, 1981) p.54-85



through Schlesinger's counterforce doctrine. The rejection of the argument that the long-range TNF were basically not induced by the U.S. defence programme requires detailed analysis, since there were good reasons for this argument playing such an important role in the peace movement's analyses. Since later on the basic elements of the Schlesinger doctrine will be related to the German first use concept, a detailed description cannot be avoided. The doctrine is better known under the term "counterforce" doctrine. The use of this term stresses the targets of Schlesinger's revised SIOP. In this context the term "Limited Nuclear Options" will be applied, since the focus of attention will be the doctrine's overall characteristics and premises.

Statements as the following by Helga Haftendorn might have induced the interpretation that in view of the 1975 Defense Budget's request for an Advanced Cruise Missile and a more accurate warhead for the Pershing all technological elements of the LRTNF originated in the U.S. Defense Program<sup>43</sup>:

"Schlesinger's Absicht war es, die Bedeutung der in Europa stationierten Kernwaffen herunterzustufen. Mit dem Beschluß zur Modernisierung der seit 1969 in der Bundesrepublik stationierten Pershing-Raketen und der Entscheidung für die Entwicklung von fortgeschrittenen Marschflugkörpern (ACM), mit dem die vorhandenen TNF 'sicherer' gemacht werden sollten, wurde jedoch gleichzeitig die waffentechnische Grundlage für den NATO-Doppelbeschluß gelegt."<sup>44</sup>

An analysis of the intentions of Schlesinger's counterforce doctrine cannot avoid contradictions and ambiguities: even analysts from the strategic community pointed out that "(t)he words Schlesinger used ... were often confusing, even to their authors."<sup>45</sup> Cordesman identified the continuing debate inside the Pentagon as to precisely how the U.S. would implement the doctrine and the technical uncertainties affecting U.S. forces as a reason for this.

---

<sup>43</sup> Haftendorn's indication that the 1975 Defence Budget requested an examination of the extension of the Pershing's range does not correspond to the original text in the defence budget. Haftendorn, 1985, *op.cit.*, p.250

<sup>44</sup> "It was Schlesinger's intention to reduce the importance of the TNF in Europe. However, a technological foundation for the NATO Dual-Track decision was laid with the decision to modernise the Pershing, which has been deployed in the Federal Republic since 1969, and the decision for the development of the advanced cruise missile (ACM) which was assigned to make the existing TNF more secure." *ibid.* For the same assumption, see Jürgen Maier, "Der Atomkrieg rückt näher", in: Die Grünen, *Schlachtfeld Europa* (Stuttgart: Die Grünen, 1981)

<sup>45</sup> Cordesman, 1982, *op.cit.*, p.14

### 8.2.1. Description of the counterforce doctrine

The Nixon administration pursued a strategy of greater flexibility in the use of strategic weapons, since it was argued that otherwise an aggressor could be tempted to make limited use of nuclear weapons in the event of a crisis. Flexibility would make the probability of nuclear response more credible.<sup>46</sup>

On January 10, 1974 Schlesinger, at a luncheon with the Overseas Writers Association in Washington, spelled out the main element of the new concept while confirming that a "change in the strategies of the United States with regard to the hypothetical employment of central strategic forces"<sup>47</sup> had taken place. This "change" refers to the U.S. targeting strategy; in order to avoid for the President of the United States to have only the option "to target Soviet cities initially and massively" in the event of a possible recourse to strategic weapons,<sup>48</sup> it was publicly admitted for the first time since McNamara's Ann Arbor speech, that the change in U.S. targeting strategy implied military targets as well: "Military targets are, of course, one of the possible target sets."<sup>49</sup> In his annual report to Congress Schlesinger is even more explicit on the counterforce aspect involved in U.S. strategic planning: "It is true that in addition to retaliatory targeting against urban and industrial centers, our war plans have always included military targets."<sup>50</sup>

Two reasons which might have played a role in this renewed emphasis on counterforce options were vehemently publicised.<sup>51</sup> To Schlesinger, a radical change in declaratory policy and a vigorous public debate seemed the most promising way to achieve the advanced strategic programmes and the relatively small changes in action policy. The second reason was certainly to

---

<sup>46</sup> For the evolution of the Nixon administration's "Limited Strategic Options", see *ibid.*, pp. 14 and Ball, 1975, *op.cit.*

<sup>47</sup> "Flexible Strategic Options and Deterrence. Excerpts from the Press Conference of U.S. Secretary of Defense James Schlesinger, 10 January 1974", in *Survival*, (Vol.16, No.2, March/April 1974) pp.86-90, here page 86

<sup>48</sup> *ibid.*, p.87

<sup>49</sup> *ibid.*, p.87

<sup>50</sup> U.S. Department of Defense, Fiscal Year 1975, *op.cit.*, 1974, p.4

<sup>51</sup> Schlesinger utilised several occasions provided by hearings and interviews as well as his Defense Reports to explain the new doctrine to the public.

signal to the Soviet Union that, in spite of detente and SALT, the United States was willing to continue the arms race.<sup>52</sup>

In a briefing, Schlesinger explained the difference between present and previous U.S. options:

"(W)e had a number of options that had been built into our war plans, but all of these options were at a very high level which would have caused major fatalities in the Soviet Union. So we had options, but all of them that had been specified in the SIOP were at a fairly high level ... In practice, we had a very limited number of massive options. What we are trying to do now is to broaden the spectrum and particularly to provide some options at the lower end of the spectrum."<sup>53</sup>

Schlesinger stressed that the change in U.S. strategy did not imply an increase in the number of strategic forces, but rather an improvement in missile accuracy and a change in targeting programmes. Thus, this new strategy would not be affected by SALT and its main intention would be to bring the U.S. into a position in which "the Soviets fully understand ... if they insist on racing - that we are prepared to match them."<sup>54</sup> Although Schlesinger concedes that it is not possible for either the United States or the Soviet Union to achieve a disarming first strike, he is worried about the increasing invulnerability of both superpowers' second strike forces and concludes:

"Consequently, the range of circumstances in which an all-out strike against an opponent's cities can be contemplated has narrowed considerably and one wishes to have alternatives for employment of strategic forces other than what would be, for the party initiating, a suicidal strike against the cities of the other side."<sup>55</sup>

The implementation of the new doctrine of "Limited Nuclear Options" (LNO), with its request for flexibility and selectivity, included a need for new intelligence, targeting, C<sup>3</sup>I and damage assessment capabilities and for an

---

<sup>52</sup> Ball, 1975, op.cit., p.47

<sup>53</sup> U.S. Congress Senate, Briefing on Counterforce Attacks, Hearing before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, 93rd Congress, Secret Hearing held on September 11, 1974, Sanitized and Made Public on January 10, 1975 (Washington D.C.: U.S.G.P.O., 1975,) p.37, subsequently quoted as: U.S. Congress Senate, Briefing on Counterforce Attacks, 1975

<sup>54</sup> Press Conference with Schlesinger, op.cit., p.86

<sup>55</sup> ibid., p.87

increased accuracy of the warheads as well as the ability to retarget them rapidly.<sup>56</sup>

The strategic Research & Development programmes which were demanded in the context of the new strategy were also meant as "hedges against the unknown outcome of SALT II".<sup>57</sup> Whether the level of strategic arms would decrease or increase would depend on the behaviour of the Soviet Union. However, the United States would prefer a balance in such a way that "strategic equivalence can be achieved at the lowest cost and least destabilizing level of forces."<sup>58</sup>

In line with the common feature in the statements of U.S. defence policy to legitimise its arms build-up by reference to alleged Soviet military capabilities, Schlesinger also argued that the U.S. might have to face a limited Soviet nuclear attack, to which it might not have a response of equal rank. The main task of U.S. strategy would be to compensate for the effect of self-deterrence which would occur when the United States would fail to match Soviet capabilities:

"If our only option were to be able to launch massive strikes against the Soviet urban industrial base, the Soviets in these hypothetical circumstances - and I continue to stress that they are hypothetical - might believe that the United States would be self-deterred and that, therefore, they could with relatively low risk selectively attack the interior of the United States. If the United States possesses the ability to respond in kind, then the Soviet planner is faced with the prospect that the United States would respond and leave him in a no gain situation and, therefore, he would continue to be deterred."<sup>59</sup>

Whereas Schlesinger considered the risk of a massive Soviet surprise attack on U.S. forces to be "close to zero under existing conditions"<sup>60</sup>, he thought the only way a nuclear war would be likely to be initiated is through miscalculation on the part of the Soviet leadership. If there was a risk that the Soviets might consider worth running, Schlesinger would locate it "principally" in Europe.<sup>61</sup>

---

<sup>56</sup> Cordesman, 1982, op.cit., p.15. Cordesman called the doctrine Limited Strike Options.

<sup>57</sup> U.S. Department of Defense, Fiscal Year 1975, op.cit., 1974, p.6

<sup>58</sup> ibid

<sup>59</sup> U.S. Congress Senate, Briefing on Counterforce Attacks, op.cit., 1975, p.9

<sup>60</sup> U.S. Department of Defense, Fiscal Year 1975, op.cit., 1974, p.38

<sup>61</sup> U.S. Congress Senate, Briefing on Counterforce Attacks, op.cit., 1975, p.41

This threat assessment served as a further legitimization of the counterforce strategy. Schlesinger argued that he acted with special regard to his European allies since the United States' coupling with Europe would be reestablished by enhancing the credibility of the U.S. strategic commitment to Europe:

"To the extent that we have changed our targeting doctrine, we have recoupled U.S. strategic forces with the security of Western Europe."<sup>62</sup>

Thus, the test which the flexibility doctrine would have to meet, would be conducted in those parts of the world where the United States perceived a conventional imbalance with the Warsaw Pact, e.g. in Europe.

### **8.2.2. Basic features of the limited nuclear options**

Basic elements of Schlesinger's doctrine are the concepts of controlled escalation and thus of intra-war deterrence. The Soviet Union should be given an incentive to be rational because "into the wartime period"<sup>63</sup> the United States will need to reserve its strategic forces for attacking Soviet cities. Thus, even after the outbreak of a war, the aggressor would still be deterred from targeting the cities of the United States and Europe.

As mentioned above, a basic element of these concepts of controlled escalation is the assumption of the opponents' rational behaviour. Schlesinger suggested that "if we were to maintain continued communications with the Soviet leaders during the war, and if we were to describe precisely and meticulously the limited nature of our actions... political leaders will be under powerful pressure to continue to be sensible."<sup>64</sup>

---

<sup>62</sup> *ibid.*, pp.41. For confirmation that these doctrinal changes were aimed mainly at decreasing European apprehensions, see James Schlesinger, "The Eagle and the Bear" in *Foreign Affairs* (Vol.63, No.5, 1985), pp. 937-961

<sup>63</sup> U.S. Department of Defense, Fiscal Year 1975, *op.cit.*, 1974, p.5

<sup>64</sup> U.S. Congress Senate, *U.S.-U.S.S.R. Strategic Policies*, Hearing before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, 93rd Congress, 2nd Session on U.S. and Soviet Strategic doctrine and Military Policies, (Washington D.C.: U.S.G.P.O., March 4, 1974), p.13, subsequently quoted as: U.S. Congress, Senate, *U.S.-U.S.S.R. Strategic Policies*, 1974

However, Schlesinger also had to concede that no guarantee could be given that escalation control works: "We can give no assurance that a small exchange would not escalate to a higher level."<sup>65</sup>

Even if counterforce limited nuclear options cannot guarantee the avoidance of an apocalypse, they can at least ensure that the war will be terminated under conditions which are favourable to the United States: "(W)e will be in a position to assure the termination of hostilities under conditions which are relatively favorable to us."<sup>66</sup> An explanation of what "favorable conditions" meant for the United States is not given.

Above all, Schlesinger, in addition to his efforts to develop more credible nuclear strategic options, stressed the necessity of achieving a high nuclear threshold by strengthening conventional forces.<sup>67</sup> His strategy emphasised the necessity of fighting a war with conventional weapons as long as possible and within flexible response of stressing the element of "direct defence" much more strongly than "the threat of escalation".<sup>68</sup>

His advocacy of a high nuclear threshold was unambiguous:

"In the interest of minimizing possible wartime destruction in NATO Europe, it is highly desirable to maintain a high nuclear threshold and use nuclear weapons only if absolutely necessary (e.g., in response to WP use of nuclear weapons or to prevent major loss of NATO territory or forces if conventional defense fails.)"<sup>69</sup>

This willingness is expressed practically in the number of days for which the United States plans to fight a war conventionally. While McNamara planned for 60 days, Schlesinger planned to prolong the holding operation to 90 days.<sup>70</sup>

---

<sup>65</sup> U.S. Congress Senate, Briefing on Counterforce Attacks, op.cit., 1975, p.37

<sup>66</sup> ibid., p.4

<sup>67</sup> U.S. Department of Defense, Fiscal Year 1975, op.cit., 1974, p.8

<sup>68</sup> Secretary of Defense James R. Schlesinger, The Theater Nuclear Force Posture in Europe, A Report to the United States Congress in Compliance with Public Law 93-365, (Washington D.C., April 1, 1975) p. 12, subsequently quoted as: TNF-Report, 1975

<sup>69</sup> ibid

<sup>70</sup> U.S. Congress Senate, U.S. Forces in Europe, Hearings before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign

If direct defence were to fail and in case the use of nuclear weapons were inevitable, Schlesinger planned to place at the military planners' disposal nuclear weapons designed:

1. to prevent the enemy from achieving his immediate military objective while threatening other high-value enemy targets;
2. to signal to the enemy that the attack was limited and that its purpose was to terminate the war immediately;
3. to gain control over the future conduct of the war until the negotiations started; and
4. to rule out opportunities for future low-cost, low risk initiatives by the enemy.<sup>71</sup>

These objectives necessitated nuclear weapons which would be able to strike "meaningful targets with a sufficient accuracy-yield combination to destroy only the intended target and to avoid widespread collateral damage."<sup>72</sup>

Meaningful targets included military installations such as silos and airfields. Schlesinger confirmed that "(w)e already have a long list of such possible targets...To the extent necessary, we are retargeting our forces accordingly."<sup>73</sup>

While Schlesinger's new strategy did not imply new hardware in the shape of great new strategic weapons systems and expenditure, he planned to supplement the SIOP with a range of preplanned limited nuclear options, the necessary real-time retargeting capabilities and command and control support.<sup>74</sup> This concept necessitated nuclear weapons which guarantee an

---

Relations, 93rd Congress, (Washington, D.C.: U.S.G.P.O., July 25 and 27, 1973) p.80, subsequently quoted as: U.S. Congress Senate, U.S. Forces in Europe, 1973. See also K.-Peter Stratmann, Die Sicherheit des NATO-Abschnitts Mitteleuropa als Strategisches Problem. Untersuchungen zur Glaubwürdigkeit der gegenwärtigen NATO-"Posture", (München/Ebenhausen: Dissertation 1978), p.285

<sup>71</sup> Davis, 1975/76, *op.cit.*, p.7

<sup>72</sup> U.S. Department of Defense, Fiscal Year 1975, *op.cit.*, 1974, p.5

<sup>73</sup> *ibid.*, p.39

<sup>74</sup> For a helpful analysis of Schlesinger's doctrine see also Benjamin S. Lambeth, Selective Nuclear Options in American and Soviet Strategic Policy, Rand Report, R-2034-DDRE (Santa Monica, California: Rand Corporation, December 1976), pp.24-33

optimal combination of damage limitation, destructive power and flexibility. These are nuclear weapons with low yield and high accuracy, penetration capability and survivability.

### **8.2.3. The Role of the TNF in Schlesinger's Doctrine**

These doctrinal developments were of high importance for the European allies because Schlesinger's proposals also included a revision of the TNF posture. In response to the amendment by Senator Sam Nunn, which called for a coordinated NATO nuclear posture<sup>75</sup>, Schlesinger provided an extensive public presentation of U.S. nuclear policy with his report on the TNF. The general background to the U.S. strategy was explained in this report as well as the way in which theatre nuclear doctrine had evolved within that strategy. It also went into considerable detail concerning the weaponry.

The following two roles are foreseen for the TNF:

1. as a response to a theatrewide, preemptive nuclear attack by the Warsaw pact and
2. as a response to an overwhelming WP conventional attack.<sup>76</sup>

If the WP, according to its strategy, began with theatrewide nuclear strikes against NATO nuclear and military forces, a primary purpose of the NATO TNF would be to provide a credible retaliatory response and "thereby to deter them".<sup>77</sup>

However, Schlesinger's overall concept of the use of TNF assigns them an explicit military role far beyond their role as a retaliatory and deterrent threat: apart from their task of changing the assessment of WP political leaders regarding early victory, the TNF must reverse the tactical situation in order to create a situation "conducive to negotiations in which NATO has some tactical advantages."<sup>78</sup> This is the new element of Schlesinger's counterforce strategy

---

<sup>75</sup> see chapter 4.2.1. for the background to Schlesinger's TNF revision.

<sup>76</sup> TNF-Report, 1975, op.cit., p.13

<sup>77</sup> ibid, p.13

<sup>78</sup> ibid, p.14



which envisages the same dual and alternate role for the TNF McNamara had achieved for strategic weapons within the scope of flexible response: a war-fighting and a retaliation function.

The TNF are supposed to function militarily as a complement to conventional forces in combined conventional-nuclear battlefield operations. They should be able to destroy targets such as "front line and second echelon WP armored units and their immediate tactical support—surface-to-surface missiles and rockets, artillery and tactical air capabilities."<sup>79</sup> Deep interdiction strikes accomplished by TNF are requested as well: "(W)e should continue to develop selective, carefully controlled options that will permit us...to engage, if necessary, in a highly discriminating interdiction campaign against enemy lines of communication or forces behind the FEBA."<sup>80</sup>

Thus, NATO TNF must fulfil two functions which can hardly be accomplished simultaneously. On the one hand, their task is to control escalation and to establish intra-war deterrence, which allows only a very limited use of TNF:

"Efforts would be made to control escalation in such desperate circumstances by a combination of clearly perceivable limits on the NATO nuclear responses and the threat of more extensive strikes with theatre and strategic forces if the WP chooses to escalate."<sup>81</sup>

On the other hand, they are supposed to change the tactical situation dramatically; this necessitates their extensive and massive use. The ambiguity of the TNFs' role is expressed prominently in Schlesinger's elaboration of NATO's first use concept when he demands that the TNF should be delivered in a limited way and at the same time massively and with a shock effect:

"First use should be clearly limited and defensive in nature, so as to reduce the risks of escalation. However, the attack should be delivered with sufficient shock and decisiveness to forcibly change the perceptions of WP leaders and create a situation conducive to negotiations."<sup>82</sup>

It is not easy to see how these incompatible requirements in relation to the TNF would be reconciled in the event of a war, except that the term "limited" refers

---

<sup>79</sup> *ibid.* p.14

<sup>80</sup> FEBA: Forward Edge of the Battle Area. *ibid.* p.27

<sup>81</sup> *ibid.* p.14

<sup>82</sup> *ibid.* p.15

to the U.S. Army's concept of packages which are "limited" in respect to a specific area and time span.

While discussing the TNFs' role in terms of response to an overwhelming WP conventional attack, Schlesinger reveals his reluctance to use nuclear weapons first, because it implies the danger of uncontrolled escalation:

"The first use of theater nuclear forces, even in very limited ways, carries grave risks of escalation and should be considered only when the consequences of conventional defeat would be even more serious. If the alternative is, for example, major loss of NATO territory or forces, NATO political leaders may choose to accept the risks of first use."<sup>83</sup>

Should NATO evaluate the use of nuclear weapons as unavoidable, the TNF are a means to postpone or even suspend the employment of strategic weapons:

"(S)hould deterrence fail, our theater nuclear capabilities provide a source of limited and controlled options other than the early use of U.S. and allied strategic forces."<sup>84</sup>

Yet Schlesinger does not deny the risks and unpredictabilities involved in the employment of TNF, nor does he hide his general doubt as to whether use of TNF would result in any military advantage:

"While it is essential to theorize about the nature of tactical nuclear warfare, we must acknowledge that as a practical matter, the initiation of a nuclear engagement would involve many uncertainties...What is more, it is not clear under what conditions the United States and its allies would possess a comparative military advantage in a tactical nuclear exchange."<sup>85</sup>

While nuclear retaliatory strikes against urban-industrial targets or rear-based forces in Eastern Europe or the USSR are regarded as "probably less stable in a crisis and a less credible deterrent"<sup>86</sup> since they would provoke Soviet retaliation, deep interdiction strikes against Eastern European countries are explicitly recommended. These are necessary in order to support nuclear attacks on WP units and to counter WP interdiction attacks and to diminish the

---

<sup>83</sup> ibid., p.15

<sup>84</sup> U.S. Department of Defense, Annual Defense Department Report, Fiscal Year 1976. (Washington D.C.: U.S.G.P.O., February 5, 1975), p.III-2, subsequently quoted as: U.S. Department of Defense, Fiscal Year 1976, op.cit., 1975

<sup>85</sup> Department of Defense, FY 1975, op.cit., p.82

<sup>86</sup> TNF-Report, 1975, op.cit., p.15

Eastern European countries' willingness to cooperate with the Soviets, "thus weakening WP solidarity."<sup>87</sup>

With reference to recommendations for "selective, carefully controlled options"<sup>88</sup>, Schlesinger demonstrates much more optimism concerning military advantage than when he theorises about tactical nuclear warfare generally:

"Both options are designed to minimize the incentives for the enemy to reply at all or to respond with uncontrolled attacks."<sup>89</sup>

The use of strategic forces would be envisaged as a theatre forces support , e.g. to strike Eastern Europe and the Soviet Union in a general nuclear war. Thus, a coupling between the U.S. strategic forces and the TNF is guaranteed:

"U.S. strategic forces continue to be coupled to deterrence of attacks on Europe, both through the threat of escalation of any conflict to general nuclear war and the provision of operational plans for limited use, as necessary, of strategic forces in support of theater conflict."<sup>90</sup>

The report did not address questions about either precise size or combinations of systems in the stockpile. However, future tasks of the Pershing 1A are mentioned. The nuclear Pershing 1A is earmarked for attacks on fixed targets and would compensate for the relative ineffectiveness of the Poseidon warheads.<sup>91</sup>

It was obvious that Schlesinger transferred flexible response's principles of selectivity, flexibility and its requests for an increase of limited options to the TNF. Thus, the military requirements for the TNFs are partly the same as for strategic weapons:

1. Requirements for low collateral damage. According to this logic, reduction of collateral damage would make it more credible to the

---

<sup>87</sup> *ibid.*, p.15

<sup>88</sup> *ibid.*, p.27

<sup>89</sup> *ibid.*, p.27

<sup>90</sup> *ibid.*, p.12

<sup>91</sup> The exact text runs as follows: "Since these RVs (Reentry Vehicles, S.P.) are relatively ineffective against hard targets, other systems are required, such as Pershing with its higher yield and tactical aircraft with a higher yield capability and greater accuracy." *ibid.*, p.18

Warsaw Pact that NATO would use nuclear weapons. A low level of collateral damage would reduce civilian casualties and "perhaps" help to control escalation.<sup>92</sup> Thus, a low nuclear yield of the nuclear weapons combined with the highest possible accuracy would be necessary in order to guarantee the destruction of the target.

2. Requirements for prolonged nuclear war. Schlesinger's war scenario necessitates most of all the survivability of the TNF, since if the TNF were preemptively attacked by the Warsaw Pact, NATO would not be able to continue the war. The ambitious goal that the TNF would still operate effectively and without error in the environment of a conventional and nuclear war implies technological challenges to the U.S. armament industry. The objective of survivability necessitates the improvement of communication capabilities for command and control of nuclear forces and improvements in command, control and planning for combined conventional-nuclear operations.<sup>93</sup>

Schlesinger's strategy received President Nixon's approval in January and was issued in the document fielded as NSDM-242 (National Security Decision Memorandum).<sup>94</sup>

In correspondence to his objectives, Schlesinger's first act upon becoming Secretary of Defense in July 1973 was to approve research on a more accurate missile guidance system, at first without Congressional authorisation.<sup>95</sup> Survivability was to be improved by including an "automatic reference system", which made it possible to fire the Pershing from unsurveyed firing positions, which did not have to be preselected any more. A "sequential launch adapter"

---

<sup>92</sup> Various improvements for reduced collateral damage are suggested, e.g. reduced yield, special warhead effects such as enhanced radiation (neutron weapon), improved delivery systems accuracy. *ibid.*, p.21

<sup>93</sup> *ibid.*, p.29

<sup>94</sup> The NSDM-242 authorised the Secretary of Defense to draw up the Nuclear Weapons Employment Policy (NUWEP), implementing the counterforce strategy by setting out the planning assumptions, attack options, targeting objectives, and damage levels. NSDM-242 and NUWEP provided the framework for the new SIOP, already No.5, formally approved in December 1975. Desmond Ball, "U.S. Strategic forces. How would they be used?" in: Miller, 1984, *op.cit.*, p.219

<sup>95</sup> Ball, 1975, *op.cit.*, p.22. Within these modifications of the U.S. strategy, for example, the Department of Defense developed a new type of MIRV: the manoeuvrable reentry vehicle (MARV), planned for the Trident missile-submarine programme and the Minuteman ICBM. *ibid.*, p.23

increased the firing response time in its Quick Reaction Role and permitted a Pershing commander to count down and launch up to three missiles in rapid succession.<sup>96</sup> "The latest available technology"<sup>97</sup> to upgrade the Pershing referred to the research programmes on low-yielded warheads and a new guidance system for a smaller and more accurate Pershing 1A.<sup>98</sup>

Thus, in addition to the development of the warhead's accuracy<sup>99</sup>, improvements on the Pershing's serviceability, mobility and pre-launch survivability were announced in the 1974 DoD report; nothing however was said about an extension of the Pershing's range. As regards the ALCM, the DoD report could already announce that it would be made available for initial deployment in the late 1970s. The development of the Navy SLCM for both strategic and tactical variants was disclosed as well.<sup>100</sup> The DoD report FY 1976 explicitly mentions the problem of fratricide, which undermines the efficiency of the ICBM's. Compensation for the effects of fratricide might become a major task for the cruise missiles.<sup>101</sup>

An extension of the Pershing 1A's range is not taken into consideration by Schlesinger because TNF strikes against Soviet territory are considered as too escalatory, and should therefore be avoided. Strikes of this kind would be openly contradictory to the role the TNF play within the concept of escalation control:

---

<sup>96</sup> U.S. Department of Defense, Fiscal Year 1975, op.cit., 1974, p.114. Explanation given from Christopher Paine, "Pershing II: the Army's strategic weapon", The Bulletin of the Atomic Scientists, (October 1980), pp.25-31, here p.25

<sup>97</sup> U.S. Department of Defense, Fiscal Year 1975, op.cit., 1974, p 114

<sup>98</sup> Michael Getler, "Pentagon Considers Putting Mini-Warheads in Missiles" in Herald Tribune, January 26-27, 1974, p.2, full text quoted in Ball, 1975, op.cit., p.24

<sup>99</sup> See also "U.S. To Renounce 'Mini' Atom Arms", in NYT, May 24, 1974, p.7

<sup>100</sup> U.S. Department of Defense, Fiscal Year 1975, op.cit., 1974, p.65

<sup>101</sup> "Our own capability against ICBMs is modest - partly because our missiles lack the proper combination of warhead yield and accuracy and partly because of the complications introduced by the phenomenon known as a fratricide." U.S. Department of Defense, Fiscal Year 1976, op.cit., 1975

"Theater nuclear forces, because they do not pose a major threat to the Soviet homeland, constitute a retaliatory capability which carries a perceptively lower risk of escalation than the use of strategic nuclear forces."<sup>102</sup>

Thus the specific characteristic of the LRTNF, namely their range for hitting the Soviet Union, was incompatible with the requirements of the U.S. counterforce limited nuclear options doctrine. U.S. interpretation of flexible response and its implementation aimed at putting emphasis on conventional forces in combination with battlefield nuclear weapons and strategic nuclear weapons. The Eurostrategic level was certainly not at the focus of their attention. That does not mean that Schlesinger opposed the LRTNF deployment in Europe due to his demonstrated belief in escalation control and intra-war deterrence.<sup>103</sup>

### 8.3. LRTNF for follow-on use

There is no doubt that U.S. planners welcomed the LRTNF as a means to execute counterforce options especially with the Pershing II's capability to destroy hardened and mobile targets. Still, counterforce targeting does not imply any fixation to a geographical area which is to be targeted or to a specific moment for the launching of the weapons. A discussion of U.S. criticism about the LRTNF's vulnerable deployment mode will demonstrate that U.S. planners contemplated LRTNF for a follow-on use.

#### 8.3.1. Counterforce targeting

The reasons for U.S. planners to support the weapons programme was certainly based on the Pershing II's and GLCM's counterforce characteristics and in particular on the Pershing's capability to hit time urgent targets due to its short flight-time.<sup>104</sup> The GLCM's advantage was its greater range, since the GLCM could be deployed farther to the rear and thus gain an increased pre-launch survivability. The targeting plans, as published in official U.S. documents, reveal that specially the Pershing II is envisaged for employment against

---

<sup>102</sup> *ibid*, p.12

<sup>103</sup> See "Schlesinger Criticises U.S. Allies on Missiles", International Herald Tribune, May 26, 1981

<sup>104</sup> U.S. Department of Defense (Caspar W. Weinberger). Annual Defense Department Report. Fiscal Year 1984. (Washington D.C.: U.S.G.P.O., 1983), p.232/233, subsequently quoted as: U.S. Department of Defense, Fiscal Year 1984, op.cit., 1983

hardened critical fixed theatre targets, such as "earth covered concrete shelters ('hangarettes') and concrete revetments to protect aircraft on airbases."<sup>105</sup> The FY 1985 ACDA statement stresses above all the recent hardening of command, control and communications sites in Eastern Europe. According to ACDA, the target list for NATO's LRTNF deployment includes

"fixed IRBM/MRBM sites; naval bases; nuclear and chemical storage sites; airbases; command, control, and communications centers; headquarters complexes; fixed surface-to-air missile sites; munitions and petroleum storage areas and transfer facilities; ground forces installations; choke points; troop concentrations; and bridges."<sup>106</sup>

While Soviet strategic forces (ICBMs, SLBMs and heavy bombers) are not mentioned in the comprehensive list as potential targets, troop concentrations and C<sup>3</sup>I systems are explicitly included.<sup>107</sup>

Another important option for U.S. planners was certainly the Pershing's capability for "interdiction strikes" and so-called "second-echelon" targeting. The WP's "troop concentrations" create a special problem for NATO's defence planning. The Soviets organise their forces into three echelons belonging to different strategic levels, arrayed West to East into the Western Military District of the Soviet Union. The first echelon's function is to penetrate NATO's general positions even at the cost of attrition afterwards. The second and third echelons, moving west behind the first, have the task of continuing the offensive by exploiting the penetrations and rapidly fanning out into the NATO rear areas to bring about the collapse of NATO's defence. NATO plans to thwart the Warsaw Pact's "Blitzkrieg"<sup>108</sup> plans envisaging a timely insertion of the two echelons while continuing the offensive momentum. By destroying, disrupting and delaying the arrival of the second and third echelons, NATO can easily destroy

---

<sup>105</sup> ACDA Statement Fiscal Year 1985, *op.cit.*, p.107

<sup>106</sup> U.S. Congress, Arms Control and Disarmament Act (ACDA). Fiscal Year 1982 Arms Control Impact Statements. (Washington D.C.: U.S.G.P.O., February 1981), p.212, subsequently quoted as: ACDA Statement Fiscal Year 1982

<sup>107</sup> Except for mentioning biological and chemical sites and dams/locks, the ACDA list is identical with the target list of the Pershing II, given by the former Secretary of the Army, Clifford L.Alexander in February 1979 quoted in Ball, 1983, *op.cit.*, p.16-17

<sup>108</sup> lightning war

the WP's requisite timing and pace of the offensive.<sup>109</sup> In order to stop these WP offensive ground forces, several simultaneous actions must be taken. Among these operational actions are two of special interest in this context: attacking the mobile follow-on forces and interdicting key lines of communication to delay and disrupt the ground attack.<sup>110</sup>

The aim of interdiction is to delay and disrupt a Warsaw Pact follow-on which could reinforce the Central Battle or which would use the breakthrough successes. Two concepts are envisaged by NATO for achieving the delay, disruption and destruction of follow-on forces: the first is to target fixed military objects. There are 100 fixed key installations (bridges, railheads and choke points) which, if successfully damaged, would result in an accumulation of forces for a period of hours or days. These forces could then be attacked in place by aircraft or missiles. Cotter describes the success of the operation with the words: "In this case, what were mobile forces have now become fixed targets."<sup>111</sup>

The second concept envisages a direct attack on follow-on forces. The Pershing's flexibility in its target selection procedures demonstrates the technical capability to hit mobile targets as well.

In case of an emergency, the U.S. Army Europe (USAEUR) headquarters would order each Pershing battalion to send two of its firing batteries equipped with nuclear warheads out into the field. Then the officers of the Pershing brigade would select targets for these additional units from a "top-secret list of targets in Eastern Europe and the Soviet Union"<sup>112</sup>. The targets would be transmitted to all 3 Pershing battalions. Potential targets for Pershing II missiles would have been selected beforehand because the missiles' guidance system requires the preparation of computerised maps of all possible targets. These detailed

---

<sup>109</sup> Kenneth Watman, "Follow-on Forces Attack (FOFA) and Emerging Technologies", Military Technology, (No.2, 1986), pp.28-35, pp.29

<sup>110</sup> Donald R. Cotter, "New Conventional Force Technology and the NATO-Warsaw Pact Balance: Part II", Adelphi Papers, No.198 (London: The International Institute for Strategic Studies, Summer 1985), p.28

<sup>111</sup> Cotter, 1985, op.cit., p.30. Of the existing 1,600 fighter bombers in Western Europe, only one third are able to conduct deep interdiction strikes, see Heinz Magenheimer, Die Verteidigung Westeuropas. Doktrin, Kräftebestand, Einsatzplanung - Eine Bestandsaufnahme aus Sicht der NATO (Koblenz: Bernard & Gräfe, 1986), p.112

<sup>112</sup> Charles, 1987, op.cit., p.81



topological maps, provided by the Defense Mapping Agency in digital data form, are used in order to produce small cartridges containing computer-readable maps of particular target areas.<sup>113</sup>

In a 1977 Senate Hearing, the Pershing's capability of retargeting and attacking shifting targets was explicitly stressed by General Lennon when he compared the GLCM, SLCM and Pershing II. "Shifting targets" are those described by Cotter as moving forces which become a fixed target when getting stuck and accumulating at a chokepoint:

"Pershing II has two elements that are very important. One, it is closer to the battle and, therefore, it is easier to get the information to the Pershing unit. It is faster to get to it to start retargeting. It has a very short response time and a time of flight, so it is quite useful in attacking the shifting targets on the battlefield."<sup>114</sup>

Thus, the missiles might be capable of hitting the WP echelons which advance at a rate of perhaps 60-70 miles per 24-hour period.<sup>115</sup> It seems that these interdiction operations of either hitting the third and second echelons directly or attacking them after they have become fixed targets provided the main rationale for the LRTNF:

"(S)ie (die militärische Begründung S.P.) konzentrierte sich vielmehr auf die Erfordernisse für Gegenschläge über große Entfernungen gegen sowjetische Streitkräfte der zweiten und dritten Welle sowie die damit zusammenhängende Infrastruktur."<sup>116</sup>

The question arises, however, whether these follow-on forces will be targeted in the Soviet Union or on Eastern European territory.

It might be possible that these weapons will not be used against Soviet territory. It is technically possible - as pointed out earlier - to reduce the missiles' ranges, so that the United States can also target them against Eastern Europe. Since

---

<sup>113</sup> *ibid*

<sup>114</sup> U.S. Senate Hearings, Authorization for Military Procurement, 1977, *op.cit.*, p. 6448

<sup>115</sup> For these data see Watman, 1986, *op.cit.*, p.29

<sup>116</sup> "The decision is based on a twofold rationale, a number of military and a number of political considerations. Above all, the military rationale was independent of the build-up with the SS-20; rather, it focused on requirements for counterstrikes over long distances against Soviet forces of the second and third wave and their related infrastructure." Holst, 1983, *op.cit.*, p.507

most potential Soviet targets are already covered by U.S. based longer-range ICBMs, Walter Pincus of the Washington Post estimates that 70% of the weapons are targeted against Eastern Europe:

"Despite the newer missile's longer range, however, defense experts say 70 % of its planned targets will be in Eastern Europe, partly because most potential Soviet targets already are covered by U.S.-based, longer-range ICBMs."<sup>117</sup>

### 8.3.2. Criticism of LTRNF

While the need to modernise NATO's TNF was unanimously supported by the U.S. strategic community, the actual decision to deploy 108 Pershing II XR and 464 ground launched cruise missiles was strongly criticised by many analysts. Most of the criticism stressed the LRTNF's vulnerability, which indicates that many U.S. analysts would have liked to envisage the Pershing II and the GLCM for a follow-on use. In general, the decision was criticised under three aspects:

1. its lack of a coherent doctrine
2. the inadequacy and insufficiency of its response in regard to size and constituent elements, and
3. foremost the vulnerability of the land-deployed LRTNF

As already shown in detail, there is hardly any optimal solution to flexible response's TNF dilemma. The Pershing II and GLCM were also criticised for hardly providing any help in making the TNF posture more feasible and credible. According to several analysts the "coupling" effect, which is presumed by the Europeans to be implemented, does not work. Morton Halperin, Deputy Assistant Secretary of Defense in the Johnson administration, concluded:

"Therefore, the only good argument for a theater long-range deployment is that the United States is already committed to it and should not back away."<sup>118</sup>

This discontent is equally shared by conventionalists and minimal deterrers such as Halperin as well as by nuclear war-fighters. Several authors suspect that the use of selective employment plans as a form of nuclear bargaining

---

<sup>117</sup>. Walter Pincus, "Persings Packed to Go", The Washington Post, (October 16, 1983) p.A21. See also Buteux, 1983a, op.cit., p. 89

<sup>118</sup> Morton H. Halperin, "NATO and the TNF Controversy" in Orbis, (Vol.26, No.1, Spring 1982) p.105-116, here p. 110

during a war would lead to a massive Soviet military counter response against NATO's TNF.<sup>119</sup>

Some analysts regarded the LRTNF modernisation as a totally inefficient means of compensation for the supposedly dangerous imbalance between NATO and WP forces. Richard Burt, National Security Affairs correspondent at the New York Times, in particular, criticised NATO's decision to focus on only one element of the TNF potential and for neglecting the Soviet build-up in this area in the seventies. Burt complained:

"Moscow's nuclear modernization program is not centered around a single system but consists of several new weapons, including the SS-21, SS-22, and the SS-23 battlefield nuclear support missiles, the Backfire medium-range bomber, and the Su-19 Fencer attack aircraft...(A) comprehensive approach to theater nuclear modernization must be taken in replacing the alliance's increasingly obsolete nuclear posture rather than taking the piecemeal and ad hoc steps now underway."<sup>120</sup>

The total number (572) of long-range intermediate range missiles was criticised as well. In 1978, as the decision was actually being shaped in the HLG, the Joint Chiefs of Staff proposed to deploy more than 1,000-3,000 nuclear warheads in order to facilitate the execution of a theatre-level SIOP without relying on U.S. strategic forces for help in their annual strategic planning document.<sup>121</sup> This high number of warheads was refused by the HLG because it would have given rise to the suspicion that NATO planned to build up an independent TNF war fighting arsenal. Then it could have been argued that the employment of U.S. strategic forces would be no longer necessary, an effect which NATO wished to avoid. Also SACEUR General Haig disagreed with this small number of just 572 systems and called the decision "only political expediency and tokenism".<sup>122</sup>

Robert A. Moore, Ex-Deputy Undersecretary for research and technique, requests two and three times more weapons than the 572 contemplated

---

<sup>119</sup> See for example Makins, 1981, op.cit., p.160

<sup>120</sup> Richard R. Burt, "Washington and the Atlantic Alliance: The Hidden Crisis." in Thompson, (ed.), 1980, op.cit., pp.109-121, here p.118 and p.120

<sup>121</sup> Smith, 1984, op.cit., he indicates the number of 1,000-2,000. See for the figure of 1,000-3,000 Cordesman, 1982, op.cit., p.37

<sup>122</sup> General Haig, SACEUR, Atlantic News, September 12, 1979

systems.<sup>123</sup> NATO would lack an equivalent to the SS-20; therefore Moore proposes the development of a mobile ballistic missile with a range of 4,000 kilometres. He believes that it was wrong to decide against the Mobile Middle Range Ballistic Missile (MMRBM) in the competition with the Pershing II, because the MMRBM was offered in a version which had MIRV warheads and a longer range.

The most comprehensive criticism made by a war-fighter has been formulated by Donald R. Cotter who was Assistant to the Secretary of Defense (Atomic Energy) from 1973-1978. Cotter is even called one of the mental fathers of this armament programme, since he drafted the programme on behalf of the HLG.<sup>124</sup> He considers the LRTNF programme, agreed upon by NATO in 1979, at best as a "modest start".<sup>125</sup> He discovers a clear rationale for the TNF which is "to hold at risk" the echeloned Warsaw Pact forces and disrupt their precision time table of multiple-axes advance. Thus the WP forces would be prey to modernised precision-guided conventional forces.<sup>126</sup> However, Cotter argues, such a strategy necessitates a larger inventory of long-range TNF than actually planned, a better survivability of all nuclear forces and an improved command and control system. Therefore, a key component of Cotter's concept is a theatre information system which provides for constant surveillance and target acquisition of WP deployments. The required greater number of LRTNF could be provided by a MIRV warhead as a supplement to the basic Pershing II model, which might be made available "by the mid to late 1980s."<sup>127</sup>

William van Cleave, ex-General Adviser of the Committee of the Present Danger and advocate of a TNF battlefield capability, criticised the modernisation programme for its insufficient number, its vulnerability and the Pershing's old technology:

---

<sup>123</sup> Robert A. Moore, "Taktisches Kernwaffenpotential. Gedanken zum Udenkbaren", Internationale Wehrevue, (No.4, 1981), p.401-408, here p.407

<sup>124</sup> Donald R. Cotter, James H. Hansen, Kirk Mc Connel, Pro Pace 1983. Beiträge und Analysen zur Sicherheitspolitik. Das nukleare Kräfteverhältnis in Europa. Stand. Entwicklungen. Folgerungen. Deutsche Ausgabe des United States Strategic Institute, Washington D.C., (Bonn: Deutsches Strategieforum, July 1983) p.5

<sup>125</sup> Donald R. Cotter, "NATO Theater Nuclear Forces: An Enveloping Military Concept", Strategic Review, (Vol.9, No.2, 1981) pp.44-53, here p.52

<sup>126</sup> ibid, p.44

<sup>127</sup> ibid p.50

"Pershing IIs merely replace a very old system in small numbers with a new system with very old technology and the same small numbers....I don't regard these moves as modernization whatsoever."<sup>128</sup>

Justin "Galen" criticises the same aspect of the Pershing II's shortcomings and stresses that the improvements were made to a system which "is more than ten years old, which has very slow reaction time, which requires excessive manning, which is large and vulnerable, (and) which is comparatively easy to target."<sup>129</sup> As a particular disadvantage, Galen stresses that, unlike the cruise missile, the Pershing cannot be fired in a contaminated environment because their crews would have to expose themselves to radioactivity during the initial set-up.<sup>130</sup>

### 8.3.3. Intolerable degree of vulnerability

It seems to be more or less commonplace within the strategic community to complain about the vulnerability of land-deployed systems in general and the new LRTNF's vulnerability in particular.<sup>131</sup>

Before conclusions will be drawn from the fact that especially the invulnerability of the LRTNF was criticised by U.S. analysts, we have to point out a persistent dilemma of NATO's posture. In its overall context, a compromise always has to be found between three almost incompatible requirements: political control, invulnerability (security from enemy attack) and

---

<sup>128</sup> William van Cleave in a discussion, in Thompson, (ed.) 1980, *op.cit.*, p.226

<sup>129</sup> Justin Galen (pen name of former senior Department of Defense civilian official), "NATO's Theater Nuclear Dilemma: A new Set of Crucial Choices" Armed forces Journal International, (January 1979) p.16-23, here p.23

<sup>130</sup> *ibid.*, p.21

<sup>131</sup> Charles Burton Marshall, who points out that the Pershing IIs will be an easy target, if they are distributed among only fifteen locations; Marshall, discussion in Thompson, 1980, *op.cit.*, p.226. Galen, 1979, *op.cit.*, p.23. Thomas L. McNaugher and Theodore M. Parker, "Modernizing NATO's Long-Range Theater Nuclear forces: An Assessment", RAND P-6486, (Santa Monica, California: Rand Corporation, October 1980). Provoked by the LRTNF's vulnerability, they argue on the basis of the pressures on Soviet decision makers that a surprise attack should be attempted. p.15. Gregory Treverton argues that apart from all the advantages of sea-basing, such as mobility, the next generation of SLBM will be more accurate than current systems. Treverton, 1981, *op.cit.*, p.13. See also Cordesman 1982, *op.cit.*, p.45 and Sigal, 1984, *op.cit.*, p.39

operational flexibility. It is only possible to satisfy two of these goals while at the same time having to ignore the third.

If invulnerability and operational flexibility were the most important goals in a first logical possibility, any kind of political control would go down the drain since, in this case, most of the details of weapon deployments, targeting for battlefield strikes, and timing of the weapons' use would be unknown to the political authorities. The Alliance would arrive "at an extreme form of the 'integrated battlefield'."<sup>132</sup>

For example, to ensure political control as well as to guarantee invulnerability, the weapons would have to be hidden in a few well-concealed, dispersed sites and asked to maintain radio silence. As a result, however, operational flexibility would be lost.

Vulnerability would be increased if NATO opted for political control and operational flexibility. This option would involve a high level of communication in order to keep everyone informed of nuclear weapon deployments, of their status, movements and plans. The communications traffic would probably be detected by the Warsaw Pact, thus increasing the danger that the weapons would be discovered and preemptively destroyed or caught. Encryptions, dedicated radio nets and other measures introduced in order to increase security would handicap operational flexibility.<sup>133</sup>

In the case of the LRTNF, NATO obviously opted for

- 1) operational flexibility in order to employ them quickly, if necessary,
- 2) and for political control in the sense that political leaders would still have control over the details of the weapons' deployment
- 3) at the expense of invulnerability

The LRTNF's vulnerability which induces the so-called coercion of "using-or-losing" certainly denies them a political control in the sense of determining the moment when the weapons should be launched. Again it has to be considered what kind of arguments the German analysts had to weigh against each other: if for first use only short-range and battlefield weapons were at the disposal of

---

<sup>132</sup> Charles, 1987, op.cit., p.107

<sup>133</sup> ibid

SACEUR due to the independent U.S. command system in Europe, German politicians would probably have only a slight chance for political control upon their release. This would imply the threat of "wrong" first use. If LRTNF were deployed in Europe, German politicians could hope that, if first use would prove necessary, the "preferred" first use would be executed. In summary, in the case of the LRTNF, German politicians apparently acted according to the following priority: the highest degree of operational flexibility, limited political control and neglect of invulnerability.<sup>134</sup>

By pointing out details of the missiles' deployment status, Charles Daniel gives evidence of their high degree of vulnerability in spite of their praised mobility.

Pershing missiles are grouped into battalions of thirty-six missiles apiece; each battalion consists of four batteries. At any time, one battery from each battalion (a quarter of all Pershing missiles in Europe) is on Combat Alert Status (CAS) at a fixed location with warheads mated to the missiles and ready to fire within fifteen minutes. The other three batteries are, without warheads on their missiles, either in field training, in practice for maintenance procedures or on pre-alert status.<sup>135</sup> Traditional U.S. Army procedures call for at least one and probably two firing batteries to be out in the field at all times. The Combat Alert site is fixed and easily identified. In times of tension, the Army may put additional Pershing batteries in field training, directing them to stay hidden and ready to fire missiles with a minimum delay. An emergency action message to the battalion headquarters will order the dispersal of Pershing firing batteries. Normally, a battery moves in four convoys: three convoys will consist of firing platoons of three Pershing missiles apiece, and the headquarters for the unit, the Platoon Control Central, will make up the fourth.<sup>136</sup>

The three platoons of a single battery are deployed to field positions at prepared secret sites near several German villages. Charles supposes that,

---

<sup>134</sup> Although the argument is qualified by the fact that long-range TNF are less vulnerable to preemption than short-range nuclear systems because they can be based further back in NATO-Europe.

<sup>135</sup> Walter Pincus, "Pershing II's Deployed Faster than Expected", Washington Post, (October 8, 1984) p.31

<sup>136</sup> U.S. Department of the Army, FM 6-11, The Pershing II Firing Battery, (Washington, D.C.: U.S. Government Printing Office, 1984), p.2-1, mentioned in Charles, 1987, op.cit., p.66

although these firing sites are secret, they will be quite easily found, surveyed and reconnoitered by the Soviets. One possibility to avoid the sites being discovered would be to launch a single missile from an external firing point, at least 5 kilometres distant from the other missiles, so that attention would be distracted from the actual position of the remaining missiles. Efforts to restrict the use of radios cannot be made because keeping nuclear weapons ready for prompt use will demand frequent communication between all military men responsible for coordinating these operations. Surprisingly enough for a lay person, the means for communications on the battlefield will be a high frequency radio, one whose transmission can be picked up by the Warsaw Pact listening post. Even if these communications were encrypted, such transmissions often reveal a lot about what is going on and at the very least betray the location of the source. Thus, the WP will be able to sense a NATO nuclear strike coming and may even discover the location of the missiles. By using antennas that send a radio signal in a specific direction, the platoons are able at least to reduce the probability that the Warsaw Pact will pick up their radio transmissions and deduce their locations.<sup>137</sup>

It is not only the high probability that the WP will deduce the Pershing platoons' location through their radio transmissions that worries the military. Soviet spies or aerial reconnaissance may easily detect the Pershings' heavy convoys.<sup>138</sup>

The Pershing vehicles give an impression of being fragile since the missiles are only covered with an awning. A mere 5 psi peak overpressure is sufficient to destroy the unarmoured Pershing vehicles totally, and even lesser blast waves might render the Pershing inoperative.<sup>139</sup> Their vulnerability is also increased by the fact that Pershing missiles are transported in the midst of public traffic instead of in restricted military areas.

---

<sup>137</sup> FM 6-11, p.3-7 and p.2-2; in *ibid*, p.83 and p.101

<sup>138</sup> Denso, 1983, *op.cit.*, p.133

<sup>139</sup> Dr. Joachim Wernicke / Ingrid Schöll, Die Stationierung von Pershing II - und SS-22 - Raketen. Dokumentation im Auftrag von Prof. Dr. Ulrich K. Preuß, Prozeßbevollmächtigter der Fraktion Die Grünen im Bundestag im Organstreitverfahren gegen die Bundesregierung betr. die Stationierung von Pershing II-Raketen und Cruise Missiles in der Bundesrepublik Deutschland. (Berlin/Bonn: Die Grünen im Bundestag, Juli 1984), p.29



As opposed to the Pershing, the cruise missiles are deployed on hardened shelters which would survive a conventional attack.<sup>140</sup> Even so the GLCM has been criticised for its vulnerable deployment mode, since hard shelters on air bases do not sufficiently reduce the systems' vulnerability to pre-emptive attack.<sup>141</sup> The cruise missiles transportation vehicles are at least equipped with a shield for the missiles' carriages.

After having described these technical deficiencies in detail, the Wernicke report concludes that the question of why, in the case of the Pershing, even simple measures such as a deployment in hardened or at least fortified shelters, or the development of a Hard Mobile Launcher similar to those destined for the newly planned Small Intercontinental Ballistic Missile (SICBM)<sup>142</sup> have been renounced, remains open.<sup>143</sup>

While advocates of first use and land-deployed LRTNF point out the necessity of improving their survivability, no-first use analysts use the vulnerability as an argument to abolish the category of land-deployed LRTNF. They argue that in contrast to what applies to the category of short-range TNF – sea-deployed or air-deployed cruise missile could fully compensate for the renunciation of the options for which land-deployed LRTNF are contemplated. Johan Holst is a representative of this school of thought. Holst advocates a no-first use policy for NATO.<sup>144</sup> Whereas he criticised the Pershing 1A Quick Reaction Alert systems and the GLCM's logistic support on the grounds of vulnerability, in 1983 he tentatively suggested reopening the High Level Group's discussion on sea deployment of the cruise missiles. A renunciation of Pershing within the INF

---

<sup>140</sup> Charles, 1987, *op.cit.*, p.66

<sup>141</sup> Cordesman, 1982, *op.cit.*, p.39

<sup>142</sup> See the artist's drawing of a Boeing/Goodyear design for the USAF's Small Intercontinental Ballistic Missile in *Air Force Magazine*, May 1984, p.79

<sup>143</sup> "Es ist klärungsbedürftig, warum bei den Pershing II-Raketen selbst auf vorhandenen einfachen Maßnahmen der Unterbringung in verbunkerten oder zumindest befestigten Unterständen sowie einer seitlichen Panzerabdeckung der Transportfahrzeuge verzichtet wurde." *ibid* p.26

<sup>144</sup> Johan Jorgen Holst, "Strength with clarity", *Time*, June 29, 1984

negotiations and a freeze on all INF deployments is seriously examined by him.<sup>145</sup>

Holst's opposition to the new weapons and the resulting no-first policy was a conclusion he drew from the unattractive prospect that first use would provoke a prolonged nuclear war on the battlefield in Europe.<sup>146</sup> Thus, opposition to land-deployed LRTNF can be combined with support for a strong war-fighting capability as well as with pleading for the TNF's pure deterrent function.

First use accomplished with LRTNF in particular is viewed by some analysts as too escalatory, e.g. by two RAND analysts:

"A LRTNF strike into the Soviet Union would do nothing to degrade the Soviet Union's mobile SS-20 force, and hence would leave untouched Moscow's capability to retaliate against Western Europe...Moreover, such a strike would be perceived as raising the risk of Soviet counterattack on U.S. territory."<sup>147</sup>

In contrast to the LRTNF's employment in a first use concept, they can see the value of these missiles as a second strike force targeted against Pact bases, troop concentrations and military support facilities.

As a war-fighter and no-first use campaigner, Fred Ikle, who was a RAND analyst and Under-secretary of state in the Reagan administration, also lacks enthusiasm for the LRTNF programme. Strobe Talbott describes Ikle's role in the U.S. administration in the INF negotiations in Geneva as ambivalent. On the one hand, Ikle agreed that Pershing might confuse the WP's attack plans, on the other hand, he warned against that in spite of the Pershing II's and cruise missiles' mobility, these weapons were far too vulnerable and would only serve as a target. In line with his criticism of the LRTNF, Ikle supported Nitze's "walk in the woods", which involved renouncing the Pershing II.<sup>148</sup>

---

<sup>145</sup> Holst, 1983, op.cit.. For a similar line of reasoning see G. Philip Hughes, "Cutting the Gordian Knot: A Theater-Nuclear Force for Deterrence in Europe", Orbis, (Vol.22, No.2, 1978) p.309-332, here p.332

<sup>146</sup> Holst, 1984, op.cit.

<sup>147</sup> McNaugher / Parker, 1980, op.cit., pp.13

<sup>148</sup> Talbott, 1984, op.cit., p.82 and 226

In an article he wrote in 1980, Ikle campaigned for nuclear weapons which would be militarily meaningful; he demands the modernisation of NATO's nuclear forces so that they could serve as a second strike capability. These modernised weapons should be able to destroy military targets and at the same time survive a Soviet attack:

"NATO's emphasis on 'first use' has undoubtedly contributed to the neglect of a nuclear second-strike capability. The modernization of NATO's nuclear forces should serve, first and foremost, to improve such a second strike capability. Expenditures for new nuclear systems that could not survive a Soviet nuclear strike would be a wasteful diversion of NATO's defence budgets."<sup>149</sup>

This attitude definitely implies a refusal of the Pershing II and GLCM, although he does not explicitly express his opposition.

The countervailing approach of U.S. nuclear strategy, (as expressed in PD 59 and U.S. Defense Secretary Brown's countervailing strategy), is mainly concerned with the possibility of a protracted war, involving nuclear weapons after an initial large-scale exchange. Christopher J. Makins, a British commentator on international affairs, points out that the Pershing II and ground-launched cruise missile are "scarcely compatible with the strict logic of countervailing."<sup>150</sup> The new LRTNFs are vulnerable to an extent which renders them useless in a conflict:

"Although there can be no certainty that existing models of pre-launch survivability of TNF are highly reliable, it is by no means improbable that the effective mobility of systems such as the GLCM and Pershing II may turn out to be comparatively limited, not least because of their basing and training posture. And even at the best of times, such systems, being, theoretically at least, highly visible, merely create an incentive to the enemy to increase his efforts, conventional, unconventional and ultimately nuclear, to catch them."<sup>151</sup>

As a remedy, he proposes RV SLBMs and a dedicated SLBM force.

It appears that several U.S. war fighters seem to think that the benefit of land-based, highly accurate systems cannot compensate for their considerable

---

<sup>149</sup> Ikle, 1980, *op.cit.*, p.22. This attitude towards no-first use was visible in Ikle's doctrine as early as 1973, see Fred Ikle, "Can Nuclear Deterrence Last Out the Century?" *Foreign Affairs*, (January 1973) pp. 267-285

<sup>150</sup> Makins, 1981, *op.cit.*, p.162

<sup>151</sup> *ibid*, pp.161-162

disadvantage in being vulnerable to Soviet preemption. Instead of theatre nuclear forces for implementing NATO's first use, many U.S. analysts prefer a second strike capability with long-range theatre nuclear weapons. However, in this case they should not be land-deployed.

### Conclusion

The assumption that the Pershing II and the cruise missile are indispensable elements of a U.S. first strike strategy cannot be upheld. While both systems possess the characteristics of first strike weapons, there is no evidence that the United States needed these improved LRTNF systems in order to pursue a strategy of first strike or decapitation. Quite the contrary: Schlesinger's 1975 TNF revision put an emphasis on short-range, battlefield TNF. Since TNF strikes on Soviet territory are regarded as too escalatory according to his doctrine, long-range TNF were incompatible with the requirements of Schlesinger's U.S. doctrine of limited nuclear options. There is no doubt that U.S. planners welcomed the Pershing II and GLCM as a means for counterforce targeting such as against hardened, shifting or even mobile targets. The LRTNF's contemplated employment in follow-on strikes according to U.S. plans can be deduced from the extensive criticism the new weapons' vulnerability experienced by U.S. analysts. The next chapter will demonstrate that in German doctrines LRTNF are intended for implementing first, and not follow-on use.

## **9. The LRTNF as a result of German doctrines**

After having demonstrated the LRTNFs' role for implementing the German first use concept in this chapter, the predominance of these doctrines in shaping the LRTNF decision will be focused on. Whereby we will arrive at the conclusion that the LRTNF modernisation was most of all a result of German doctrines.

### **9.1. Implementation of First Use Concept**

In the beginning we will explain why Schlesinger's counterforce doctrine could not offer a solution to the German apprehensions about first use's foundation which had become fragile by the erosion of U.S. escalation dominance.

This chapter comprises a detailed analysis of K.-P. Stratmann's theory of controlled nuclear-strategic war, which incorporates the most comprehensive and coherent theoretical background to the German strategic views and can therefore be regarded as "ideal typical" for the German first use concept. The consensus between the German strategic experts cannot be narrowed to Stratmann's sophisticated concept, although it is incorporated in the German plea for selective employment options with a strategic character to be launched from European territory. Since Stratmann explicitly states that his concept roots in U.S. deterrence theories, these will be outlined in this context as well. We will demonstrate to what extent the first use concept was also pursued on the governmental level, and then proceed to clarify the Pershings' and cruise missiles' employment options within these German doctrines.

#### **9.1.1. Rühl's Discussion of the Schlesinger Doctrine**

The compatibility of the U.S. and German strategic principles is expressed through the German approval of Schlesinger's counterforce doctrine. Among German strategic experts there obviously was consensus to welcome the new strategic implications. In a Senate Hearing U.S. Defense Secretary Schlesinger confirmed:

"The reaction in Europe to change in targeting doctrine has been uniformly welcoming, even joyous, because they recognize that this means U.S. strategic forces are still credibly part of the overall deterrent for Europe."<sup>1</sup>

The acceptance of the counterforce doctrine's basic premise that nuclear weapons have to be usable in order to deter, did not create any difficulties for Defence Minister Leber, Foreign Affairs Minister Genscher, Chancellor Schmidt or the military elite.<sup>2</sup> In particular Defence Minister Leber welcomed the introduction of selective options.<sup>3</sup>

While the German experts involved seemed to agree on the general principles of the counterforce doctrine, Lothar Rühl gives an explanation why improvements made merely on the strategic level are no sufficient measure according to the German interpretation of flexible response.

As an effect of the Schlesinger doctrine, Rühl expected that the TNF would lose their role as a means for strategic escalation.<sup>4</sup> He argues that if the United States envisages concepts of intra-war deterrence, the longer-range TNF are reduced to being a means of tactical war-fighting. If these changes should occur, Rühl predicts two possible results which are dependent on the target planning of the strategic weapons:

- 1) Deterrence will be stabilised, if the U.S. external forces first attack military objects on Soviet territory.
- 2) If the United States plans to attack the Eastern European deployment zone, a decoupling of the geographically limited war-theatre would be the result. In this scenario, the TNF would be reduced to the status of war-fighting weapons. In this case Rühl can only see a strengthening of deterrence if the Eastern European deployment zone would be attacked in the follow-on use, i.e. after execution of first use with U.S. strategic

<sup>1</sup> U.S. Congress, Senate, U.S.-U.S.S.R. Strategic Policies, 1974, op.cit., p.8

<sup>2</sup> Hubertus Hoffmann in an interview with Harald Wust, General Inspector of the Bundeswehr from 1976-1978 in Hoffmann, 1986, op.cit., p.219

<sup>3</sup> J. Schlesinger, "Sustaining the American-German Relationship in a time of Strategical and Attitudinal Change" (Manuscript), Speech presented for the Conference on German-American Relations and the role of the Federal Republic in Europe, Wilson Center, Washington D.C. September 22/23, 1983, p.10, mentioned in ibid., p.140

<sup>4</sup> Since the text was written in 1977, Rühl was probably thinking of the FBS in the form of fighter bombers.

weapons, even if only selectively and in a geographically and politically limited manner.<sup>5</sup>

Thus, Rühl explained in what way the German experts' enthusiasm for the Schlesinger doctrine was limited: although the counterforce doctrine can be interpreted as an enhancement of the credibility of any use of strategic forces, there is no guarantee that the United States will employ its strategic forces for first use. The Germans' second apprehension referred to the target area of the U.S. strategic weapons. They suspected that these strategic weapons would be targeted not against Soviet territory but against European and non-Soviet territory. Rühl points out that Schlesinger, after his dismissal in 1975, supplemented his doctrine with the request that Europeans be assured that the United States were ready to use strategic weapons first. Rühl compares this U.S. declaratory statement with Schlesinger's simultaneous exhortation to the Europeans to build up a powerful conventional capability to avoid having to resort to the use of nuclear weapons. Rühl comments: "Damit war der Kreis der Ambivalenz der westlichen Abschreckung wieder geschlossen."<sup>6</sup>

Rene Herrmann of the Ebenhausen Institute identifies an acknowledgment on the part of United States to renounce its role as a sanctuary in the counterforce doctrine. Herrmann argues that the credibility of the threat of escalation would thereby be enhanced.<sup>7</sup> While obviously realising that Schlesinger's counterforce doctrine could jeopardise detente, Herrmann stresses that cooperative elements have to be maintained in the extreme situation of a thermonuclear war for the goal of limitation and termination of war. Rühl expresses his approval of the principle of limiting the damage by putting forward the argument that the Soviet Union should be given an incentive to terminate the war rather than to attack the United States:

"Dem nuklear angegriffenen Gegner muß dabei noch ein zwingendes vitales Interesse an der Begrenzung des nuklearen Schlagabtauschs und eine Option

---

<sup>5</sup> Rühl, 1977, *op.cit.*, p.255

<sup>6</sup> "Thus, the circle of ambivalence of Western deterrence was once again completed." *ibid.*, p.256

<sup>7</sup> Rene Herrmann, Zur Rede Verteidigungsminister Schlesingers am 10. Januar 1974, (Ebenhausen: Stiftung Wissenschaft und Politik, SWP-AP 2025, January 1974), pp.18-19

auf Einstellung der Kriegshandlungen zu auch für ihn tragbaren Bedingungen erhalten werden."<sup>8</sup>

In view of the advantages offered by the Schlesinger doctrine Rühl seems to take into account the German apprehensions that limited and selective counterforce strikes by U.S. strategic forces in the event of a "wrong" U.S. targeting could result in a limited war on European territory : counterforce is welcomed as a new means available to the United States for the purpose of regaining escalation dominance, and thus as an instrument to dominate the conditions for termination of war:

"Die von Schlesinger geforderte Optionsvielfalt soll der eigenen politischen Führung Druckmittel auf den Gegner zur Durchsetzung der eigenen Bedingungen, also ein zusätzliches Instrument für die Eskalationsdominanz geben, die dem Gegner den Einsatz der Machtmittel und die Definition des Verhältnisses von Risiko und vitalem Interesse vorschreibt, damit aber auch die politischen Bedingungen zur Beilegung der Krise auferlegen kann. Diese Doktrin setzt voraus, daß in Zukunft Drohung mit Kernwaffen möglich ist und also "nukleare Erpressung" als Mittel der Politik versucht werden könnte."<sup>9</sup>

### 9.1.2. Governmental Level

Defence Minister Leber's 1975/76 White Paper acknowledges-- although in an experienced, vague language-- the U.S. preference for a high nuclear threshold:

"Es ist gemeinsames Interesse der Amerikaner und der Europäer, die Nuklearschwelle nicht zu senken."<sup>10</sup>

---

<sup>8</sup> "The opponent who has been attacked with nuclear means must be left with a coercive vital interest in a limitation of the nuclear exchange and with an option to terminate war hostilities under conditions which are also acceptable to him." Rühl, 1987, op.cit., p.104. For the Schlesinger remarks concerning damage limitations see Davis, 1975/76, op.cit., p.7

<sup>9</sup> "The variety of options demanded by Schlesinger are supposed to give leverage to one's own political leadership in order to be able to impose one's own conditions, i.e. to give an additional means for escalation dominance with which one can both prescribe the opponent's employment of his means of power and define the relationship between risk and vital interest. In this manner, the political conditions for the termination of the crisis are imposed on the opponent. This doctrine presupposes that the threat to employ nuclear weapons is possible and that 'nuclear blackmailing' as a means of policy could therefore be attempted in the future." Rühl, 1977, op.cit., p.261

<sup>10</sup> "It is in the joint interest of the Americans and Europeans not to lower the nuclear threshold." Weißbuch, 1975/76, op.cit., p.50



On a similar level of imprecision is the statement that the tactical first use of nuclear weapons has to occur "as late as possible, but as early as necessary."<sup>11</sup> More help for an interpretation of these obscure words is provided by the White Papers' subsequent explanation:

"(D)as heißt, daß die Doktrin der Vorneverteidigung Geltung behält, die konventionellen Kräfte des Verteidigers nicht erschöpft sind und die Unkalkulierbarkeit für den Angreifer erhalten bleibt."<sup>12</sup>

While the Germans prefer the use of nuclear weapons' before conventional defence collapses, the U.S. would be prepared to accept some losses of German territory and wait until NATO had been conventionally defeated.<sup>13</sup> The German concept implies the idea that after the Warsaw Pact's occupation of NATO territory the threat of escalation with nuclear weapons would not serve to press for the Warsaw Pact's withdrawal from NATO territory. After deterrence failed, negotiations would have to be held in a military situation, in which the allies would not yet depend on the use of nuclear weapons as their only means to avoid defeat or a dangerous withdrawal. This understanding corresponds to the notion of the political utilisation of controlled escalation, which argues that negotiations – conducted under mutual nuclear threat – would hardly be an appropriate means to induce the withdrawal of a successful attacker who would still be able to continue his offensive. Under these conditions negotiations could only result in a termination of hostilities on the demarcation line of the battlefield.<sup>14</sup>

---

<sup>11</sup> *ibid.*, p.21

<sup>12</sup> "(T)his means that the doctrine of forward defence is still valid, that the defender's conventional forces are not exhausted and that incalculability is still maintained for the attacker." *ibid.*, p.21

<sup>13</sup> see chapter 3.4.1.

<sup>14</sup> "(D)iesem Zweck, den Krieg möglichst schnell abubrechen, sollten die taktischen Atomwaffen als Eskalationsträger und als Demonstrationswaffen zur Warnung eines Angreifers, seine Aggression fortzusetzen, dienen. Wenn dies aber der erklärte Bündniszweck für den Kriegsfall in Europa, also nach einem Versagen der Abschreckung, ist, dann müßte die Verhandlung in einer militärischen Lage geführt werden, in der die Verbündeten zur Stützung ihrer Verteidigung noch nicht auf den Einsatz dieser nuklearen Waffen als einziges Mittel gegen eine Niederlage oder einen gefährlichen Rückzug angewiesen wären. Diese Einsicht ist unlöslich mit dem Prinzip der politischen Nutzung des kontrollierten Eskalationsvorganges verbunden, denn Verhandlungen unter gegenseitiger nuklearer Bedrohung können schwerlich den Rückzug des erfolgreichen, zu weiterem Angriff fähigen Angreifers zum Gegenstand haben, sondern lediglich ein Ende der Feindseligkeiten auf den Demarkationslinien des Kriegsschauplatzes." ("Tactical nuclear weapons being carriers of escalation as well as demonstrative weapons should serve to this

The conflict over first use between the United States and the Federal Republic of Germany is further expressed in an even more vague principle than the two poles of late versus early use of nuclear weapons: the Germans principally prefer a "political" use of nuclear weapons<sup>15</sup>, while for the United States they only make sense for a "military" use. The political use is intended to promote communication with the attacker, to change his intentions, to prevail upon him to give up his offensive and to induce him to withdraw. While an employment of nuclear weapons is interpreted by laymen as a collapse of diplomacy and communication with the enemy, a political use of nuclear weapons would be intended precisely to reestablish communication:

"Er (first use, S.P.) sollte, wann immer er erfolgt, nur selektiv und dosiert sein. Er hat stets die möglichen Folgeeinsätze mitzubedenken. Eine gleichzeitig zu veröffentlichende politische Erklärung muß Zielsetzung und Sinn des Einsatzes erläutern. Die politische Bedeutung des Ersteinsatzes von Atomwaffen ist daher größer als seine mögliche militärische Wirkung auf das eigentliche Kampfgeschehen."<sup>16</sup>

In spite of the Germans' refusal of a military use of nuclear weapons, their doctrine foresees that selective first use of nuclear weapons --although militarily not decisive-- should be targeted against military objects.<sup>17</sup> This

---

purpose, i.e. to terminate war as quickly as possible, in order to warn off the attacker to discontinue his aggression. If this, however, is the explicit purpose of the alliance for the event of war in Europe, i.e. after failure of deterrence, then negotiations would have to be conducted in a military situation in which the allies would not yet have to depend on the employment of these nuclear weapons as their sole means against defeat or a dangerous withdrawal. This insight is insolubly connected with the principle of the political use of controlled escalation because negotiations under mutual nuclear threat can hardly have as their central issue the withdrawal of the successful attacker who is able to continue his aggression but they can merely aim at terminating hostilities along the line of demarcation of the battlefield.") Rühl, 1974, *op.cit.*, p.123

<sup>15</sup> "Ersteinsätze nuklearer Waffen sollen weniger eine militärische Entscheidung herbeiführen, als vielmehr eine politische Wirkung erzielen." ("First use of nuclear weapons is not so much intended to lead to a military decision, as to have a political effect.") Weißbuch, 1975/76, *op.cit.*, p.21

<sup>16</sup> "It (first use) should, if accomplished, only be selective and measured. The potential follow-on strikes have to be considered as well. A political declaration, which is to be issued simultaneously, has to explain the aim and the purpose of first use. Therefore, the political meaning of first use of nuclear weapons is greater than its potential military effect on the actual combat." Ulrich De Maiziere, Führen - im Frieden. 20 Jahre Dienst für Bundeswehr und Staat. (München: Bernard & Graefe, 1974), p.206. Until mid 1972 de Maiziere served as Inspector General of the Bundeswehr and, with four stars, he was West Germany's highest ranking soldier.

<sup>17</sup> Weißbuch, 1975/76, *op.cit.*, p.22

German rope-dance between the political and military use of the TNF is also expressed in the 1973/74 White Paper, which states that sufficient TNF have to be available in order "to deter effectively or to defend".<sup>18</sup>

It has to be stressed again that there are also several U.S. analysts, although they are certainly in the minority, who supported deployment of LRTNF for the first use concept.<sup>19</sup>

### 9.1.3. Theory of controlled nuclear-strategic war

Karl Peter Stratmann, a researcher in Ebenhausen since 1967, presented the most coherent and comprehensive German interpretation of flexible response in his 1981 book "NATO in der Krise?". This analysis is the most sophisticated explanation of why, from a German point of view, NATO should deploy land-based intermediate-range nuclear ballistic missiles on European soil.

In 1974 Stratmann still belonged to a group of authors who campaigned for the mininukes for German defence.<sup>20</sup> This proposal is clearly aimed at enhancing

---

<sup>18</sup> Weißbuch, 1973/74, op.cit., p.16, emphasis by S.P.

<sup>19</sup> See for example Alton Frye, "Nuclear Weapons in Europe: No Exit from Ambivalence", Survival, (Vol.22, No.3, May/June 1980), p.98-106

<sup>20</sup> In 1974 an Ebenhausen project group, whose participants included Graf Kielmannsegg, Ex-Commander in Chief of Central Europe, presented a model of "limited response". Assuming it would be impossible to defend Europe with a massive employment of TNF and futile to build up a conventional defence in the Federal Republic, the group advocated the employment of mininukes exclusively on the German battlefield. As long as the enemy refrains from detonating nuclear weapons on NATO's territory, NATO should keep to the same restriction. The combination of conventional weapons and a very limited employment of weapons could - according to the authors - preserve the Federal Republic from the greatest danger: a WTO "Blitzkrieg" and, thus, a *fait accompli* on German territory. Since the Ebenhausen concept necessitates a very early employment of the mininukes, their command and control system would have to be altered by a predelegation to SACEUR. Hans Breithaupt, Dieter Kalix, J.A. Graf Kielmannsegg, K. Peter Stratmann, Zur Problematik einer Verteidigungsoption für Mitteleuropa in den Achtziger Jahren. Zusammenfassung (Ebenhausen: Stiftung für Wissenschaft und Politik, SWP-S 2023/Z, Mai 1974), p.43 and 45. The German Ebenhausen proposal revealed considerable similarities to the 1973 proposal of their U.S. colleagues from the Los Alamos laboratory. In the Federal Republic this position was supported and advocated by General Karl Schnell, until 1977 Commander in Chief of Central Europe (CINCENT) and later on State Secretary in the Ministry of Defence. General Schnell advocated a change in the nuclear weapons' time consuming command structure by authorising local commands to decide on their employment. Die Welt, November 16, 1976, p.3 Thus this group might have hoped

the political control for the Federal Republic, since it implies the advice to predelegate the mininukes' employment to SACEUR. As early as 1977 he had already advocated the German first use concept which called for long-range TNF. In the European-American workshop's book "Beyond Nuclear Deterrence", Stratmann opposes the idea of a war limited to Western and Central Europe. He argued that such a war would destroy the Federal Republic as well as its neighbours. Above all, it would be militarily unsuccessful for NATO.<sup>21</sup> He and Rene Herrmann recommend a deemphasis of "geographical constraints" in order to influence the Warsaw Pact's risk assessment, since "(t)his improves the chances for war termination under conditions which are acceptable for NATO."<sup>22</sup> In 1978 Stratmann submitted his dissertation, which is to a large extent identical with his 1981 book. While obviously fully acknowledging the divergences between the European and American views concerning the TNF posture, he opposes the notion within the strategic community that these interests are incompatible. In order to secure NATO's capability to act effectively in time of crisis, he offers as a solution the concept of a nuclear strike with a signal effect intended for communication with the opponent on a strategic level.

Stratmann starts from the premise that NATO could easily live with a military posture limited to the mere threat of nuclear escalation, as long as the United States possessed strategic superiority and detente seemed to render a war in Europe impossible or at least very improbable. The deterioration of the political situation in the late seventies and the resulting danger of a superpower clash in South Asia, the Near East or Africa posed the question of how NATO could stand up against the spread of an armed conflict to Europe.<sup>23</sup> His strategic-political "Glass Bead Game"<sup>24</sup> is meant to offer a solution to the dilemma of the Federal Republic's destiny of being the battlefield of a future war between the

---

to enhance German influence on first use. The proposal can be interpreted as a counterreaction to the U.S. Army plans of Selective Employment Packages and thus as an attempt to counteract U.S. plans of employing TNF massively in first use.

<sup>21</sup> K.- Peter Stratmann and Rene Herrmann, "Limited options, Escalation, and the Central Region" in Holst/Nerlich, 1977, *op.cit.*, p.239-254

<sup>22</sup> *ibid.* p.254

<sup>23</sup> "wie die NATO sich bei Übergreifen eines bewaffneten Konflikts auf Europa militärisch behaupten könnte." Stratmann, 1981, *op.cit.*, p.233

<sup>24</sup> Christian Potyka, "Zwischen zwei Alpträumen. Europäische Zweifel an der US-Strategie der atomaren Abschreckung" *Süddeutsche Zeitung*, May 23/24, 1981, p.8

superpowers. According to his analysis, NATO does not need a new strategy, but rather an adequate means with which to implement this strategy.<sup>25</sup>

His basic assumption is that the deterioration of U.S. strategic superiority caused an erosion of NATO's escalation dominance. Escalation dominance is the military capability to determine the scope of action by having advantages on higher levels of feasible force.<sup>26</sup> During the long-standing period of U.S. strategic superiority, the United States could assume its ability to transform this strategic advantage into controlled escalation steps and these again, within a limited war situation, "into superior possibilities of pressure".<sup>27</sup> This way of strategic thinking favoured the development of "cooperatively oriented" concepts of nuclear war-fighting, war limitation and war termination and psychological models of "nuclear bargaining" and "competition in risk taking."<sup>28</sup> By referring to Thornton Read, Stratmann explained why he applied the term "bargaining" to a nuclear war:

"... (B)oth sides prefer a battle in which punishment is low to one in which it is high. Thus, although the contestants have incompatible interests in the territorial aspect of war, they have some degree of common interest in the punitive aspect. This common interest makes bargaining possible and provides a motive both for limiting violence of combat and for terminating the war in a negotiated settlement reflecting limited political aims."<sup>29</sup>

---

<sup>25</sup> Stratmann, 1981, *op.cit.*, p.233

<sup>26</sup> "Eskalationsdominanz bedeutet die militärische Fähigkeit, durch Vorteile auf den höheren Stufen anwendbarer Gewalt den gegnerischen Handlungsspielraum bestimmen zu können." ("Escalation dominance means the military capability to determine the opponent's scope of action through advantages on higher levels of feasible force.") *ibid.*, p.14, see also the discussion in 7.2.1.

<sup>27</sup> "Die damalige Erwartung, die Abschreckung auf strategischer Ebene aufgrund der eigenen Überlegenheit stabil halten und den potentiellen strategischen Vorteil der USA in einem denkbaren 'general nuclear war' in Form kontrollierter nuklearer Eskalationsschritte in überlegene Druckmöglichkeiten im begrenzten Krieg umsetzen zu können, hat die Entwicklung und nachwirkende Bedeutung 'kooperativ' ausgerichteter Konzepte zur nuklearen Kriegführung, Kriegsbegrenzung und -beendigung begünstigt." ("The expectation then, to stabilise deterrence on a strategic level and to transform a potential strategic advantage of the U.S. in a conceivable 'general nuclear war' in the form of different stages in a controlled nuclear escalation into superior pressuring methods has favoured the development and lingering significance of 'cooperative concepts' for nuclear war-fighting, war-limitation and war-termination.") *ibid.*, p.204

<sup>28</sup> *ibid.*, p.204

<sup>29</sup> Thornton Read, "Limited Strategic War and Tactical Nuclear War", in Knorr / Read, 1962, *op.cit.*, pp.67-116, pp.81/82

The "competition of risk taking" is to be translated into "escalation" and constitutes a central term in Kahn's analysis "On Escalation." For an explanation he uses the famous analogy of the "chicken game", which is played by two drivers on a road with a white line down the middle:

"Both cars straddle the white line and drive toward each other at top speed. The first driver to lose his nerve and swerve into his own lane is 'chicken' - an object of contempt and scorn-and he loses the game."<sup>30</sup>

Stratmann adopted this notion that nuclear strikes have to be seen primarily under the aspect of their signal value, as a means of communication with the opponent's political leadership.

These escalation concepts are based on the premise of the adversaries' joint interest in avoiding escalation into a general nuclear war even after the outbreak of a war. Stratmann argues that U.S. strategic superiority with its resulting escalation dominance gave reason to believe that NATO would bargain successfully with the Soviet Union during wartime negotiations. Stratmann concludes that, while NATO's concept of deliberate escalation (with its first use proviso) was built on a concrete basis during the period of U.S. strategic dominance, NATO's current posture lacks such a support.<sup>31</sup> It seems that Stratmann wants to reestablish the conditions of the period of U.S. strategic superiority, which is supposed to have expired as a result of SALT's codification of strategic parity between the superpowers.

Stratmann's analysis of the current NATO posture concludes that NATO forces do not correspond to the requirements of flexible response. He argues that although NATO's inefficiency and strategic dilemma could not be concealed from the Warsaw Pact, the Soviets had considerable apprehensions that NATO could make the threat of first use a reality by setting first use into motion in the event of a war. Stratmann criticises the fact that, in contrast to unwarranted Soviet apprehensions, NATO's concept of nuclear escalation experienced a constant devaluation in Western strategic debate. With some justification the Soviets seemed to assume that the United States would hardly tolerate a defeat in Europe and would prefer to take on the risk of nuclear escalation rather than retreat. In contrast to this tendency in U.S. and European public debate, the

---

<sup>30</sup> Kahn, 1965, op.cit., p.10

<sup>31</sup> Stratmann, 1981, op.cit., p.205

Soviets still seemed to start from the premise of the existence of a U.S. "coupling" to the European defence. In his explanation why this "coupling" cannot be taken for granted, Stratmann reveals a sober perception of European-U.S. relations:

"Im Kontrast zu dieser (sowjetischen S.P.) Einschätzung herrscht in der amerikanischen Sicherheitsdebatte die Tendenz vor, die militärische Präsenz und die Bündnisverpflichtungen der USA in Europa in den traditionellen Kategorien einer globalen Strategie der Vorfeldverteidigung zu sehen. Westeuropa wäre im Kriegsfall für die meisten Amerikaner ein vorgeschobenes Kriegstheater, auf dem zur Unterstützung der Verbündeten ein starkes amerikanisches Expeditionskorps operieren würde. Im Vordergrund steht das Interesse, die Eskalation des regionalen Konflikts in einen die Existenz der USA gefährdenden strategischen Kernwaffenkrieg zu verhindern. Der Nachweis dieser Fähigkeit ist sicherlich eine wesentliche Voraussetzung für die Bereitschaft der amerikanischen Bevölkerung, das Engagement der USA in der Verteidigung Europas politisch mitzutragen. Die Möglichkeit des 'decoupling' wird deswegen nicht ausgeschlossen."<sup>32</sup>

Any scenarios of fighting a geographically limited nuclear war, with unrestricted intensity however, are unacceptable for Stratmann. As a basic solution for avoiding such a battlefield war, he advocates a very low nuclear threshold. While a high nuclear threshold would merely offer NATO the choice between escalating to dramatic strikes on a strategic level or simply capitulating, a low nuclear threshold could prevent such a predicament:

"Das zeitliche Hinausschieben des Ersteinsatzes würde also mit dem Risiko der später um so rascheren nuklearen Eskalation zum allgemeinen nuklearen Krieg erkaufte, während ein frühzeitiges, aber wesentlich begrenzteres nukleares Engagement diese Gefahr unter Umständen erheblich geringer halten könnten."<sup>33</sup>

As already pointed out, the concept of deliberate escalation assumes the termination of war on terms which are acceptable for NATO. While analysing

---

<sup>32</sup> "In contrast to this (Soviet S.P.) evaluation, the tendency to consider the U.S. military presence and U.S. allied obligations in Europe in terms of the traditional categories of a global strategy of forward defence dominates the American security debate. For most Americans in the event of war, West Europe would be a forward theatre of war, where a strong American expeditionary force would operate in order to support the allies. In the foreground there is an interest to avoid the escalation of a regional conflict into a strategic nuclear war which threatens the USA's existence. The evidence of this capacity is certainly an important assumption in relation to the readiness of the American population, politically to support U.S. engagement in Europe's defence. Therefore, the possibility of a 'decoupling' is not excluded." *ibid.*, p.230

<sup>33</sup> "The postponement of first use would be dearly bought with the risk of an even quicker nuclear escalation to a general nuclear war, while an early, but much more limited nuclear engagement, might reduce this threat considerably." *ibid.*, p.69/70

the implications of these scenarios, which assume a termination of war on terms favourable for NATO, Stratmann comes to the conclusion that they imply the expectation that the Warsaw Pact would possess a much lower risk readiness than NATO. This assumption is illogical, Stratmann argues, because it is based on the idea that the Warsaw Pact might attack Europe with such limited war aims and such a low risk readiness that, after a nuclear reaction of NATO, the Warsaw Pact would rather stop its aggression or even withdraw than respond with nuclear weapons itself. Stratmann quotes ex-SACEUR Goodpaster in order to demonstrate that to expect the Soviet Union's withdrawal presupposes a feeling of moral inferiority on the part of the Warsaw Pact being the aggressor:

"I am sometimes asked whether a deterrent or if the deterrent has failed - say, at the time you have to use limited or selective tactical nuclear weapons. My own feeling is that there are still heavy forces that work on the other fellow at the time. It is he who is aggressive. He has come across the Iron Curtain. If his forces leading the attack have been destroyed and if he has taken heavy losses, then he has to consider the burden. The burden here is on him to make a decision as to whether to escalate."<sup>34</sup>

Stratmann assumes that in the event of war the Warsaw Pact would naturally consider NATO as the immoral attacker. He denies that the Soviet strategy envisages any kind of "experimental" aggression. The expectation of the Warsaw Pact's withdrawal would only be warranted under the assumption that either the Warsaw Pact did not calculate its risk and hoped for a "cheap success" (the case of miscalculation) or that the Warsaw Pact and NATO started a low intensity conflict which escalated accidentally (this is called inadvertent escalation).<sup>35</sup> This premise of the Warsaw Pact's lower political risk readiness serves as a justification for the expectation that a war could be limited to Europe and be terminated on conditions favourable to NATO. Stratmann doubts this essential premise and refuses to make an assessment as to which of the adversaries would be the first to surrender or to collapse in the event of war. After these critical remarks on the basic assumptions of NATO's concept of deliberate escalation, he puts forward --obviously rhetorically-- the following question in his dissertation: "Entwertet dieses Untersuchungsergebnis das für die NATO-Strategie wesentliche Konzept der vorbedachten (nuklearen)

---

<sup>34</sup> quoted in *ibid.*, p.206, see also Andrew Goodpaster, "NATO Strategy and Requirements 1975-1985" *Survival*, (Vol.17, No.5, Sept./October 1975) p.210-216, here p.212

<sup>35</sup> *ibid.*, p.205/206



Eskalation?"<sup>36</sup> The reader, inclined to expect a definite "no", is told that the utility of politically controlled selective strikes is beyond question for the escalation system:

"Der politische Nutzen nuklearer Flexibilität steht für die NATO deswegen - unabhängig von der Bereitschaft des WP, im Ernstfall auf die vorgeschlagenen Begrenzungen einzugehen - außer Frage."<sup>37</sup>

The aim to be achieved by controlled nuclear strikes is a termination of war which still gives NATO an opportunity to influence the results. This purpose becomes quite clear when he complains about war termination under the condition of the loss of escalation dominance by strategic nuclear parity:

"Die besondere Schwierigkeit der Kriegsbeendigung unter den Bedingungen nuklearer Parität liegt darin, daß ein einmal erreichter Waffenstillstand wahrscheinlich durch die erneut einsetzende Wirkung nuklearer Abschreckung sofort eingefroren würde. Die zu diesem Zeitpunkt eingetretenen politischen und territorialen Veränderungen wären dann kaum mehr rückgängig zu machen."<sup>38</sup>

The unreserved reestablishment of the status quo ante has to be kept untouched because NATO's existence would otherwise be at stake:

"Der WP könnte nicht darauf rechnen, die mit seinem Angriff angestrebten, vorgeblich begrenzten Ziele in einer politischen Lösung bestätigt zu bekommen; denn dies käme der Zustimmung der westlichen Allianz zu ihrer Selbstauflösung gleich."<sup>39</sup>

As will be seen later, the Pershing and cruise missiles are the means to implement these selective strikes. The motive of the Germans to request the LRTNF is often assumed to be an attempt to strengthen "coupling". However, the crucial question - how the Warsaw Pact reacts to these selective nuclear

---

<sup>36</sup> "Do these results devalue NATO's essential strategic concept of deliberate (nuclear) escalation?" Stratmann, 1978, *op.cit.*, p.275

<sup>37</sup> "Therefore, the political utility of nuclear flexibility for NATO is beyond question - independently of the WP's readiness to accept the proposed limitations in case of emergency." *ibid.*, p.275

<sup>38</sup> "Under the conditions of nuclear parity the particular difficulty is that once achieved, an armistice would be frozen immediately by the reestablishment of deterrence. At this point the territorial and political changes of the war could hardly be restored." Stratmann, 1981, *op.cit.*, p.220

<sup>39</sup> "The WP could not assume that the supposedly limited aims it pursued, would be confirmed in a political situation, because this would be tantamount to the Alliance approving of its own dissolution." Stratmann, 1978, *op.cit.*, p.284

strikes - is not answered adequately by Stratmann. If it were true that the selective strikes would result in a "coupling" by involving the United States in the war, one would expect convincing arguments from Stratmann for his expectation that the Soviet Union would react by retaliating against the U.S. homeland and not perhaps in a different way. Instead, he does not seem to exclude the possibility that, even despite Soviet strategic thinking, NATO's nuclear first use would result in negotiations and induce the Warsaw Pact to discontinue the hostilities; but at the same time he arrives at the conclusion that the Warsaw Pact could not start negotiations about an armistice from a weak position and therefore would not renounce counter-demonstrations:

"Allerdings könnte sich die WP-Führung voraussichtlich ohne eine nukleare Gegendemonstration nicht auf Waffenstillstandsverhandlungen einlassen. Ihr durch den Angriffssentschluß dramatisch gesteigertes politisches Engagement zwänge sie wahrscheinlich, die psychologischen und taktischen Vorteile, die die NATO durch ihren Ersteinsatz erlangt hätte, durch eine eigene nukleare Reaktion zu neutralisieren, um die Verhandlungen aus einer starken Position beginnen zu können."<sup>40</sup>

His opposition to NATO's intensification of battlefield options and any scenarios of selective nuclear strikes within a war-fighting strategy leads him to adopt concepts which were generated by U.S. strategic theorists in the sixties. On the basis of game theory, system analysis and behaviour theories, Thomas Schelling and Thornton Read developed and advocated a strategy for conducting a controlled nuclear-strategic war. Consequently, they opposed any geographically limited battlefield options. An indispensable premise of these theories of deterrence is the opponents' rational behaviour and their calculating, value maximising strategy with respect to decision making so that in case of a crisis the opponents are still able to communicate and to agree on the rules by which the war should be fought. "Escalation" and "deescalation" are means of "war-bargaining". Thus, these concepts regard nuclear weapons as a means of communication and diplomacy rather than as military instruments.<sup>41</sup>

---

<sup>40</sup> "The WP leadership probably would not agree to armistice negotiations without a nuclear counterdemonstration. By its political commitment, stimulated by the decision to attack, the WP would probably be forced to neutralise via its own nuclear reaction the psychological and tactical advantages which NATO had achieved by accomplishment of first use, in order to be able to begin the negotiations from a strong position." *ibid.*, p.276

<sup>41</sup> See Thomas C. Schelling, *Arms and Influence*, (New Haven and London: Yale University Press, 1966). Schelling, 1960, *op.cit.* Read, 1962, *op.cit.* Kahn, 1965, *op.cit.*

Since in the "fog of the battle" the opponent might easily feel deceived, it is impossible to keep these rules by means of selective nuclear strikes in a battlefield war. A "drastic simplification" of communication by qualitatively limited strikes is needed. The limitations have to be "distinctive, finite, discrete, simple, natural and obvious."<sup>42</sup> Since in warfare "the dialogue between adversaries is often confined to the restrictive language of action and a dictionary of common perceptions and precedents",<sup>43</sup> these tacit negotiations are expressed in terms of such benchmarks as the status quo ante, "rivers and coastlines and parallels of latitude, mountain ridges and ancient boundaries."<sup>44</sup>

Since a theatre nuclear war does not offer this kind of clear dividing lines, the conclusion suggests itself that only the sanctuaries of both superpowers reflect these easily perceivable and natural benchmarks.<sup>45</sup> The solution to the dilemma of flexible response, offered by Stratmann in reference to Read is that of a "limited coercive punishment"<sup>46</sup> on a strategic level of war-fighting which allows to communicate more easily:

"Limited strategic retaliation is a simpler operation conceptually than tactical nuclear warfare. It should be easier to coordinate with the enemy...if the punitive action is not mixed up in the complexities of a ground war."<sup>47</sup>

The acceptance of Stratmann's concept is not a matter of belief or disbelief and is meant as a solution to an unresolvable strategic dilemma. The possibility of the continuation of a war after the accomplishment of first use is taken fully into account by Stratmann, according to the concept of "coupling". However, he fails to discuss why it is not much more probable to expect that the Warsaw Pact contrary to its rethoric would react on a higher rather than on a lower level: the Warsaw Pact could just as well choose to retaliate against the Federal Republic with battlefield weapons, which is precisely what Stratmann hopes to

---

<sup>42</sup> Schelling, 1966, op.cit., p.138

<sup>43</sup> ibid., p.141

<sup>44</sup> ibid. p.141

<sup>45</sup> Stratmann, 1981, op.cit., p.221

<sup>46</sup> Schelling, 1966, op.cit., p.172

<sup>47</sup> Read, 1962, op.cit., p. 95

avoid.<sup>48</sup> The actual employment of his concept might result in a catastrophe provoked by NATO's first use in order to deny the Soviet Union any limited political success.

Stratmann admits that Soviet restraint following NATO first use is quite improbable:

"Wird die nukleare Schwelle - in welcher Form auch immer - erst einmal überschritten, so verändert dies voraussichtlich die politische und militärische Wahrnehmung des Konflikts auf beiden Seiten in entscheidender Weise. ...Vielleicht sähe er (der WP, S.P.) sich selbst dann zu einer nuklearen Reaktion gedrängt, wenn er beabsichtigte, seinen Angriff einzustellen. Ein Verzicht auf eine 'response in kind' nach der nuklearen Demonstration der NATO könnte den Eindruck hervorrufen, als sei die sowjetische Führung bereit, über Waffenstillstands- und Friedensbedingungen aus einer Position relativer Unterlegenheit zu verhandeln."<sup>49</sup>

Although this statement is made in the context of an evaluation of NATO's so-called "demonstration" strikes which – as distinct from strategic bargaining strikes-- do not convey a substantial amount of communication to the Soviets, it reveals Stratmann's general disbelief in a Soviet surrender after implementation of NATO first use. This is the basic idea of deliberate escalation within flexible response. Thus, one of the main German strategic theorists offers a concept of initiating very early in a conflict, i.e. before the conventional defence collapses, a strategic limited and selective nuclear war in the name of enhancing the credibility of deterrence.

#### **9.1.4. Pershing's Employment options in the German first concept**

In a 1982 draft paper Stratmann elucidates his strategic concept by assigning special roles to certain types of weapons. He advocates the nuclear Pershing II and would be ready to sacrifice the ground-launched cruise missiles in arms control agreements.

---

<sup>48</sup> Harald Glaser and Hans Horch: Neue Waffen, alte Ordnung. Ziele und Hintergründe der "Nach"rüstung (Stuttgart: Alektor Verlag, 1983) p.22/23

<sup>49</sup> "Once the nuclear threshold is crossed, regardless in whatever form, the opponents' political and military perception will probably have changed dramatically. Maybe it (the W.P.,S.P.) would feel pushed to a nuclear counterreaction, even if it had intended to suspend the attacks. Not to 'respond in kind' after NATO's nuclear demonstration could create the impression that the Soviet leadership would be ready to negotiate on peace and armistice conditions from a position of relative inferiority." Stratmann, 1981, op.cit., pp.92-93

After having stressed the essential role of NATO's first use and the TNF's main role of implementing the concept of deliberate escalation, Stratmann suggests TNF employments against selected military targets in Central Europe, Eastern Europe or in the Western part of the Soviet Union. Although accomplished with TNF, first and follow-on strikes against Soviet territory would possess strategic character since they imply a high level of escalation. Thus, the TNF would demonstrate that a war could escalate into a strategic war and thereby play a key role in convincing the Soviet Union of the coupling effect.<sup>50</sup>

According to the conception that regards nuclear weapons as a means of communication, NATO's selective use should enable the opponent to identify the strike's starting point, its prospective termination, the number and quality of the delivery systems and weapons used and eventually, the category of targets and the geographical area NATO intends to target. Therefore, instead of attacking in a series of single strikes over a long period of time, these selective options have to be executed in one condensed strike. A short flight time of the delivery system would be welcome when targets required long-range weapon systems. Therefore, ballistic missiles seem to be much more appropriate systems for this combination of requirements than fighter bombers and cruise missiles. Because of their lack of penetration capability, fighter bombers are an inadequate means to fulfill this function. Their high failure rate would result in multiple coverage of one target; collateral damage would thus be enormous. Simultaneously employed conventional missiles would be indistinguishable from these fighter bombers.

For the same reasons, cruise missiles are rejected as a means for selective strikes, i.e. since they share "the sketchy unclear signature of aircraft."<sup>51</sup> Stratmann concludes from his analysis:

"Optimal erscheinen demgegenüber ballistische Mittelstreckensysteme mit Einfachsprengkopf, deren hohe Zuverlässigkeit und Eindringfähigkeit einen Verzicht auf Mehrfachabdeckung erlaubt."<sup>52</sup>

---

<sup>50</sup> Stratmann, 1982, *op.cit.*, p.22/23

<sup>51</sup> "Da Marschflugkörper die skizzierte unklare Signatur von Flugzeugen teilen, sind auch sie für begrenzte strategische Einsätze wenig geeignet." *ibid*, p.63

<sup>52</sup> "In contrast, intermediate-range ballistic systems with a single warhead, whose high reliability and penetration capability allows to renounce multiple target coverage, seem to be optimal." *ibid*, p.63

The interdiction tasks can be fulfilled much better by conventional cruise missiles. However, a simultaneous deployment of land-deployed nuclear and conventional cruise missiles is not to be recommended since the Soviet Union could misinterpret the conventional attack as a nuclear one. Because of their long range (2,500 kms) the cruise missiles pose the problem that, independently of their real target, the Soviet Union will perceive them as a strategic threat. For these reasons Stratmann considers nuclear GLCM as counterproductive for implementing the first use concept, and assigns to them the role of bargaining counters for arms control. If, however, exclusively conventional cruise missiles were deployed in the Federal Republic, due to their accuracy, greater range and effective munition they would be the appropriate means for taking over nuclear weapons' battlefield and interdiction missions.<sup>53</sup>

Nuclear cruise missiles should be deployed on submarines, ships and rear deployed aircraft, but not on ground. Qualitatively and quantitatively unlimited, these cruise missiles could be coordinated with the U.S. strategic forces and take over the task of covering several targets of NATO's preplanned strikes. Thus, even if deployed in a very high number, these cruise missiles would not arouse any suspicion in the Soviet Union of the intention to regionalise a nuclear war in Europe by the build-up of a nuclear strike force which could manage a European defence without the support of the U.S. strategic forces.

Due to their clearly identifiable maximal range and by the choice of their deployment area, land-deployed intermediate-range ballistic missiles could signal to the Soviet Union which targets would not be threatened. Thus, ballistic missiles contribute considerably to the transparency of the LRTNF programme's intentions and allow a "clear structure and proportioning of the potential."<sup>54</sup>

It has to be conceded that Stratmann's analysis was published in 1981, when all decisions concerning the character of the LRTNF deployment had already been made. Thus, his advocacy of the Pershing II can be interpreted as a subsequent legitimization of the NATO-Dual Track decision. However, it should

---

<sup>53</sup> ibid., pp.68-69

<sup>54</sup> "Eine klare Gliederung und Proportionierung des Potentials", ibid., p. 70. Stratmann does not take into consideration that the Pershing's range could be easily increased by using fuel with a higher or lower energy content per unit, see chapter 7.2.5.

be borne in mind that the main features of his strategic concept had been put forth in his dissertation as early as 1978.

Lothar Rühl, as State Secretary always committed to taking arms control into consideration, does not explicitly demand deployment of the Pershing II and GLCM. The value he assigns to the Pershing II is expressed in his comment on the results of the "Walk in the Woods", when the U.S. negotiator Paul Nitze agreed on the renunciation of the Pershing II. Rühl objects to the contemplated renunciation of the Pershing II, because the result would not only mean a reduction in the modernisation programme, but also a change in the character of the NATO Dual-Track decision.<sup>55</sup>

Whether strategic or tactical, the Germans prefer a "political" use of the nuclear weapons. Stratmann admits that the distinction between a "political" and "military" use of nuclear weapons is a rather artificial one:

"Aus den genannten Gründen können sich die selektiven Einsatzoptionen der NATO nicht allein den Erfordernissen der nuklearen Demonstration von Eskalationsbereitschaft in Form sorgfältig dosierter 'Signale' ausrichten. Sie müssen auch operativen Gesichtspunkten Rechnung tragen. Eine klare Unterscheidung zwischen politischen und militärischen Optionen ist deswegen nicht möglich."<sup>56</sup>

Lothar Rühl cannot see a problem in distinguishing between political and military requirements. First as well as follow-on strikes have to comprise both elements: the political signal effect and operative aspects for guaranteeing NATO's capability to fight the war:

"Wesentlich dabei ist, daß der geplante Ersteinsatz geeignet ist, die beabsichtigte politische Signalwirkung mit operativen Erfordernissen zu verbinden und daß der NATO danach für ihre Eskalationsfähigkeit und die Fähigkeit zur Verteidigung die notwendigen Mittel, die Einsatzflexibilität und also die Optionsvielfalt erhalten bleiben."<sup>57</sup>

---

<sup>55</sup> Rühl, 1987, *op.cit.*, p.301

<sup>56</sup> "For the above-mentioned reasons the selective employment options of NATO are not merely determined in line with the requirements of nuclear demonstration of readiness to escalate in the form of deliberately dosed "signals". They also have to take operative aspects into consideration. Therefore a clear distinction between political and military options is not possible.", emphasis in the text, Stratmann, 1982, *op.cit.*, p. 49

<sup>57</sup> "It is essential that the contemplated first use is suitable to combine the intended political signal effect with operative requirements and that NATO afterwards maintains the necessary means for its ability to escalate and to defend. It further has to maintain employment flexibility and the variety of options which are necessary for a continuation of the operations." Rühl, 1987, *op.cit.*, p.104

The incompatibility between a purely political and exclusively military use also applies to the LRTNF: it is not possible to employ the LRTNF in an operative, "war-decisive" manner and at the same time as a means for deliberate escalation. Stratmann stresses this point explicitly:

"Da die Kontrollierbarkeit nuklearer Eskalation vor allem von den Risikowahrnehmungen und dem Konfliktverhalten der sowjetischen Führung bestimmt würde, kann das landgestützte TNF-Dispositiv der NATO in Europa nicht zugleich potentiell kriegsentscheidende operative Fähigkeiten aufweisen und als Mittel vorbedachter Eskalation dienen."<sup>58</sup>

The build-up of a "war-decisive" potential would provoke the Soviet Union to preempt. Consequently, some military objects are excluded as targets from all NATO nuclear weapons employments: Stratmann is opposed to any targeting of the C<sup>3</sup>I systems. These C<sup>3</sup>I systems have to be spared as targets because after their destruction the Soviet Union would no longer be able to evaluate the situation, to control its forces and thus to communicate with NATO about termination of war.<sup>59</sup> In the context of his general criticism of the Reagan administration, (i.e. that this administration is dominated by the intention to confront the Soviet Union with the threat of a defeat<sup>60</sup>), he voices his apprehension that the United States might plan to smash and interdict the WP offensive forces with TNF strikes. He argues that this kind of strikes would most likely be chosen by the U.S. president because they can be executed without targeting Soviet territory:

"Da diese Optionen zur Zerschlagung und Abriegelung der Offensivstreitkräfte des Warschauer Pakts keine 'strategischen' Einsätze der USA gegen die UdSSR erforderten, ist es sogar wahrscheinlich, daß sich der amerikanische Präsident im Fall eines großangelegten sowjetischen Angriffs in Europa für sie entschied. Trotzdem bleibt eine derartige Doktrin aus politischen und strategischen Gründen für das TNF-Dispositiv der NATO ungeeignet."<sup>61</sup>

---

<sup>58</sup> "Since the controllability of nuclear escalation is mostly determined by the Soviet leadership's risk perception and conflict behavior, the land-deployed TNF potential of NATO in Europe cannot simultaneously feature potentially war-decisive operational features and serve as a means for deliberate escalation." Stratmann, 1982, *op.cit.*, p.43, emphasis in the text

<sup>59</sup> *ibid.*, p.60/61

<sup>60</sup> "die Führung der UdSSR in ihrer Wahrnehmung mit dem Risiko einer Niederlage zu konfrontieren", *ibid.*, p.38

<sup>61</sup> "Since these options for destruction and interdiction of the WP's offensive forces do not necessitate U.S. 'strategic' employments against the Soviet Union, it is even probable that the American President, in the case of a full-scale Soviet offensive in



Accordingly, Stratmann criticises proposals for a build-up of a denial capability in Europe below the strategic threshold, which envisages tactical employments on the battlefield or strikes against the Soviet echelons deep inside WP territory over an extended geographical area. The military value of interdiction strikes is not denied by Stratmann; however, the TNF, contemplated for these kind of options would have to be deployed in the United States or at sea. Thus, he does not consider the U.S. capability of smashing these Soviet forces on non-Soviet territory on a level below strategic options as a geostrategic advantage.

However, Stratmann also agrees that selective employment cannot merely be characterised in terms of the requirements of a nuclear demonstration in the form of an escalation in deliberately dosed "signals." If employments must be intensified, they should be targeted against objects of military value. He envisages a complementary combination of both aspects. He concedes, however:

"Allerdings ist unverkennbar, daß der Versuch, politische und operative Kriterien miteinander zu vereinbaren, um so mehr der Quadratur des Kreises gleichen muß, je stärker Zielsetzung und Wirkung selektiver nuklearer Einsatzoptionen durch militärische Sachzwänge dominiert werden."<sup>62</sup>

Stratmann does not indicate what kind of military objects he would preferably target. That he approves of targeting nuclear missile depots can only be deduced from his criticism of the scenario of a war limited to Europe which also spares the Soviet Union as a sanctuary, because the Soviet Union's land-deployed nuclear forces which threaten Western-Europe "could not be attacked".<sup>63</sup>

#### **9.1.5. LRTNF as a means for first- and follow- on use**

Among the German strategic experts there is consensus to demand land-deployed and most of all long-range theatre nuclear forces. However, while Stratmann clearly envisages the Pershing as a means to execute first use within

---

Europe, would opt for them. Nevertheless, for political and strategic reasons, such a doctrine remains inappropriate for NATO's TNF potential." *ibid*, p.39

<sup>62</sup> "However, it is evident that the attempt to reconcile political and operative criteria is bound to resemble the quadrature of the circle, the more strongly the intention and effect of selective nuclear employment options are dominated by military coercion." *ibid*, p.49

<sup>63</sup> *ibid*, p.39

deliberate escalation, his colleagues Lothar Rühl and Uwe Nerlich contemplate the LRTNF also as a means for escalation control. Accordingly, there is strong dissent between Stratmann and Rühl/Nerlich in regard to the targets question.

In contrast to K.-P. Stratmann, Lothar Rühl and Uwe Nerlich advocate targeting the WP's offensive forces and part of the C<sup>3</sup>I systems with the longer-range land-deployed theatre nuclear forces. In order to accomplish these tasks, Nerlich considers a sufficient survivability level for the long-range TNF to be indispensable. He demands:

"Reducing vulnerability of long-range TNFs is indeed of utmost importance if the alliance is successfully to discourage Soviet preemption, control escalatory process up to a point, hold second- and third-echelon forces at risk, and retain a retaliatory force that deprives Soviet continental forces of their ultimate weapon status."<sup>64</sup>

However, at the same time he can see another advantage of the LRNTF in a pre-deterrence concept: namely that it could serve as a means for a blackmailing effect on the Soviet Union while being targeted by LRTNF. By striking NATO's LRTNF preemptively in a war, the Soviet Union would have to take the destruction of Europe into account; this would be counterproductive to its war aims. Therefore, it is possible that the Soviet Union would prefer to accept the risk that the LRTNF could be launched against Soviet territory, rather than to try for escalation.<sup>65</sup> This "blackmailing concept", however, presupposes that LRTNF are deployed in such a way that the Soviet Union can count on a chance to destroy the LRTNF preemptively. These statements suggest that Nerlich favours vulnerable LRTNF for first use as well as invulnerable LRTNF for follow-on use in case first use should fail. But in accordance with German first use he demands:

"However, the most crucial issue is whether to deploy new long-range theatre nuclear forces in Western Europe that can be targeted against Soviet territory. This would blur the crucial Soviet dividing line between a European-theatre war, which spares Soviet territory as a sanctuary, and intercontinental war."<sup>66</sup>

---

<sup>64</sup> Nerlich, 1980, *op.cit.*, p.120

<sup>65</sup> Uwe Nerlich, "Die Stationierung landgestützter Mittelstreckenwaffen in Europa. Zur Begründung der Einführung landgestützter LRTNF", *Europäische Wehrkunde* (Vol.30, No.8, 1981) p.337-341

<sup>66</sup> Nerlich, *op.cit.*, 1980, p.120

Accordingly, Uwe Nerlich does not show any modesty in his requests for the weapons systems appropriate to enhance West Europe's security. He asks for a combination of land and sea-deployed systems, long-range conventional and nuclear capabilities, a mixture of U.S. and non-U.S. forces and of ballistic missiles (Pershing II and a mobile ballistic missile - MMRBM) and GLCM in Central Europe and at the flanks, ALCM for theatre-wide operations and dual-capable aircraft. These requests were made by Nerlich at a Euro-American workshop in September 1978.<sup>67</sup>

Lothar Rühl points out that the main reason for the modernisation of the longer-range TNF was NATO's inability to provide sufficient conventional means to accomplish interdiction strikes against the Soviet deployment area:

"Weitreichende Mittel zum Gegenschlag auf das Aufmarschgebiet des Angreifers sind unerlässlich, wenn die Heranführung der Reserven aus der westlichen UdSSR abgeriegelt oder wenigstens verzögert werden soll. Aus dieser Notwendigkeit und der technischen Unmöglichkeit, dafür in ausreichendem Maße zielwirksame konventionelle Waffen einzusetzen, ergab sich in den 70er Jahren die Begründung für die vorgesehene Modernisierung der TNF-Systeme der NATO in Europa mit einer Verstärkung der Komponente größerer Reichweite."<sup>68</sup>

After confirming that NATO had gained the capability to attack hardened military targets in Eastern Europe and in the Western districts of the Soviet Union, Lothar Rühl stresses the advantage of NATO's capability to destroy part of the Soviet military establishment:

"Die nachweisbare, kalkulierbare Abwälzung des Risikos auf den sowjetischen Militärapparat als Steuerungsinstrument und zugleich Träger eines Angriffs gegen Westeuropa soll in einer Spannungskrise das sowjetische Risiko-Erfolgs-Kalkül gegen einen Rückgriff auf militärische Gewalt wegen zu hoher

---

<sup>67</sup> This article was made public in 1983. Uwe Nerlich, "Warum Mittelstreckenwaffen? Optionen der NATO: Erfordernisse und Beschränkungen" in Pro Pace. Deutsches Strategie-Forum. Streit um den Frieden. Bemerkungen und Meinungen zum Doppelbeschuß der NATO., (Bonn: Verlag Mittler & Sohn, 1983) pp.7-15, here p.14

<sup>68</sup> "Longer range means to conduct a counter-attack against the aggressor's concentration area are indispensable, if the follow-on forces in the Western Soviet Union are to be interdicted or at least delayed. This necessity and the technical incapability of employing effective conventional weapons in sufficient numbers comprised the rationale for the contemplated modernisation of TNF systems in the seventies emphasising the element of extended range." Rühl, 1987, op.cit., p.108

operativer und strategischer Risiken bestimmen und damit gegen den Entschluß zum Krieg."<sup>69</sup>

The question of the Pershing's range is again of considerable significance in the context of the LRTNF's target planning against Soviet C<sup>3</sup>I systems, since first echelon command-control-communications centres of the Soviet government and armed forces<sup>70</sup> at national level are dispersed and hardened within an 80-mile (128 km) radius of Moscow.<sup>71</sup> In a very advanced forward deployment mode the Pershing would have the range to reach this Moscow belt; however, according to a German governmental statement, the forward deployment which would be necessary to hit the belt would not be considered because of the resulting increased vulnerability.<sup>72</sup>

While the White Paper denies the Pershing II's capability to reach Moscow, it implicitly admits that the missiles are able to hit one tenth of the Soviet ICBMs.:

"The 108 Pershing II missiles would not be able to inflict a first strike, due to their limited range and limited numbers. They would not even reach Moscow and threaten barely a tenth of the 1,300 Soviet intercontinental ballistic missiles. Moreover, very important command and control centres of the Soviet C<sup>3</sup>-network designed with options of redundancy anyhow, are beyond their range."<sup>73</sup>

---

<sup>69</sup> "The demonstrable and calculable shift of the risk onto the Soviet military apparatus as a control instrument and as the agent of an attack against Western Europe is designed to influence the Soviet risk-success calculation so that the Soviet military apparatus does not resort to military force in view of running operative and strategic risks which are too high, and thus decides against going to war." *ibid.*, p.109/110. For confirmation see also another quotation: "This strategy (flexible response, S.P.) requires adequate instruments for its implementation, that is, LRINF systems capable of striking part of the European USSR in order to hold at risk part of the Soviet military establishment." Lothar Ruehl, "INF: Threat or Protection?" in NATO's Sixteen Nations, (Vol.28, No.8, December 1983-January 1984) pp.18-24, here p.20

<sup>70</sup> Decapitation strikes, as discussed in the Pentagon in the early eighties, involve both, the knocking out of the political and the military leadership. (see chapter 8.1.1.)

<sup>71</sup> see Chapter 7.2.5.

<sup>72</sup> Prof. Dr. Joch Abr. Frowein and Prof. Dr. Lerche, Prozeßbevollmächtigte der Bundesregierung in einem Antrag vom 20. März 1984 an das Bundesverfassungsgericht, Zweiter Senat, betr. Organstreitverfahren der Fraktion Die Grünen im Deutschen Bundestag, Az.2 BvE 13/83, S.27 und 28, quoted in Wernicke / Schöll, 1984, *op.cit.*, p.103

<sup>73</sup> White Paper, 1983, *op.cit.*, p.77

However, while contending the Pershing's incapability as a first strike weapon, German Defence Minister Wörner involuntarily confirmed the Pershing II's range capacity to destroy even a third of the Soviet C<sup>3</sup>I systems and a tenth of Soviet intercontinental ballistic missiles:

"Die Sowjets wissen ganz genau, daß die Pershing II als Erstschlagwaffe völlig untauglich ist. Sie erreicht noch nicht einmal ein Drittel ihrer Führungszentren, noch nicht einmal ein Zehntel ihrer Interkontinentalraketen..."<sup>74</sup>

## **9.2. Predominance of German views in the hardware decision**

This final chapter wishes to demonstrate that these German concepts dominated the shaping of the hardware decision. We will show how the Germans succeeded in imposing their policy line on the modernisation of the TNF, above all in respect to extending its range. It will also be demonstrated that particularly land deployment of the missiles was an indispensable element of the German first use concept. This section, however, does not intend to argue that these German guidelines prevailed against the declared U.S. position. Rather, evidence will be given that these two essential elements in the LRTNF modernisation, i.e. the extension of range and land deployment, reflect a dominance of German guidelines as well as the vulnerable deployment mode of the LRTNF.

### **9.2.1. The prevalence of the Pershing's extended range**

In the mid-50s, there was a debate between the U.S. Air Force and U.S. Army over the development of both Medium-Range Ballistic missiles and Anti-ballistic Missiles. The Secretary of Defense made the decision that the Army should have shorter-range systems and the Air Force longer-range systems to support ground combat in Europe.<sup>75</sup> A subsequent Army request to extend the

---

<sup>74</sup> "The Soviets know precisely that the Pershing II is an inadequate means for a first strike. It does not even reach one third of its Command Centres, nor even a tenth of its intercontinental ballistic missiles." Defence Minister Manfred Wörner on German TV, October 11, 1983, printed in Presse- und Informationsamt der Bundesregierung, Stichworte zur Sicherheitspolitik, October 1983, p.52, quoted in Wernicke / Schöll, 1984, op.cit., p.95

<sup>75</sup> U.S. Senate Hearings, Authorization for Military Procurement, 1977, op.cit., pp.6430-6431

range of the Pershing was turned down.<sup>76</sup> Obviously, the Army pursued its long-term goal of continuing to compete with the Air Force and Navy on controlling strategic missiles<sup>77</sup>.

The producer of Pershing 1 and Pershing 1A<sup>78</sup>, the Martin Marietta Corporation in Orlando, was awarded a six-month contract for studies on alternative ways of satisfying the need for a more credible theatre nuclear interdiction capability, as early as February 1969. The study concluded that an upgraded Pershing type missile with a precision guided reentry vehicle would be the most cost effective solution.<sup>79</sup> In May 1971, the Army Missile Command awarded Marietta a contract for the preliminary design effort on the guidance system. The Army also requested a project entitled "radar area correlation" in the Army's FY 1972 research budget. Finally, five years after the improvement of the Pershing 1A actually began, Pershing II appeared in the Army's FY 1975 budget for the first time. Congress supported the development of the guidance system, but reduced the \$11 million request for the reentry vehicle to \$2 million. Well in advance of the Congressional appropriation for that year, i.e. in April 1974, the Army awarded Marietta a contract to conduct advanced development of a much more accurate version of the Pershing, to be called Pershing II. When, in the context of the U.S. Defense Secretary's report on the Fiscal Year 1975, the Pershing II programme was first presented to Congress, no mention was made of an increase in the existing 400-mile range. Thus, at this stage, the range of the Pershing II was to remain the same as that of the earlier missile.

It was not until August 1978 that the State Department's and Secretary of Defense Brown's resistance to a longer range for the Pershing was overridden. Every year since 1970 SHAPE planners have requested the development of a theatre nuclear missile with a range of at least 1,000 nautical miles, the equivalent of 1,835 kms. The U.S. Army amended this requirement for

---

<sup>76</sup> Leitenberg, 1978, op.cit., p.11

<sup>77</sup> "Ever since 1956, when then Secretary of Defense Charles 'Engine Charlie' Wilson restricted the Army's offensive nuclear role to short-range systems, the service has never quite been reconciled to being excluded from strategic offensive warfare.", Paine, 1980, op.cit., p.25

<sup>78</sup> The major innovation from the Pershing 1 to the Pershing 1A was the incorporation of the ability to fire from unsurveyed firing positions. The missile was kept unchanged. Cochran, 1984, op.cit., p.291

<sup>79</sup> Paine, 1980, op.cit.

Pershing II.<sup>80</sup> After a formal requirement on the part of the U.S. Army in December 1978, the Defense System Acquisition Review Council (DSARC) recommended Full-Scale Engineering and Development of the Pershing II.<sup>81</sup>

Since 1977, the Carter administration had revealed its irresolution in making a decision on the range of the TNFs listed for modernisation. U.S. Defense Secretary Brown remained steady in his position that the assignment of Poseidon submarines would be sufficient to meet European anxieties concerning the Soviet SS-20. At a Senate Hearing in March 1977 Col. Larry H. Hunt, Pershing project manager, stressed several times that a conscious decision had been taken to limit the Pershing's range to 400 miles in order to avoid a range capable of targeting the Soviet Union:

"I want to point out that although a significant extension of range is feasible, well beyond the 400 nautical miles, by using higher thrust propellants, a conscious decision was made to retain the 400-mile range...(T)he limitation of Pershing's range to the Eastern European area provides a highly important measure of discrete control on the process of nuclear escalation in the event NATO is required to resort to the use of tactical nuclear weapons to defend against a Warsaw Pact attack."<sup>82</sup>

This voluntary restriction of the Pershing's range was apparently also meant to exclude any disturbances of the SALT negotiations, which were of the highest priority to the Carter administration.

---

<sup>80</sup> Berry, 1979, op.cit., p.1303. U.S. House of Representatives Report, Modernization, 1980, op.cit., p.2. For the technological development of the Pershing II see also Moore, 1981, op.cit.

<sup>81</sup> Berry, 1979, op.cit., p.1303. The Department of Defense distinguishes 7 phases for a Nuclear Weapons development: (1) Weapons conception; (2) Programme on Feasibility; (3) Development Engineering or full Development; (4) Production Engineering; (5) First production Evaluation; (6) Quantity production and (7) Retirement. In February 1979, Marietta was awarded the full scale development contract of about 360 million dollars. This means that the prototype had to be transmitted for series production, a signal that this type of weapon had finally been accepted. This contract was signed exactly 10 months before the NATO Dual-Track decision was approved by the NATO ministerial meeting in December 1979. This full scale development contract and the U.S. Army's announcement fed the German public's suspicion that the Europeans have to deploy what has been produced in the United States and for which it is in search of customers. However, the engineering development decision is only the prelude to a production decision which, in the case of Pershing II Extended Range, was only given in June 1982 (although it is certainly not easy to cancel a weapons programme which has already entered the engineering phase). See also chapter 8.1.3.

<sup>82</sup> Emphasis by S.P. U.S. Senate Hearings, Authorization for Military Procurement, 1977, op.cit., p.6420 and 6425

In August 1978, as a result of the neutron bomb debacle and the HLG consensus, Brown changed his policy and approved production of the Pershing II Extended Range<sup>83</sup>; the Department of Defense's report to Congress on the Fiscal Year 1980 mentions for the first time the missile's extended range.<sup>84</sup>

The Nuclear Planning Group had ignored Brown's reluctance to approve the extension of the missile's range by stating already at the April 1978 meeting that more LRTNF were required. The NPG's announcement of April 1978 was backed by the HLG recommendation of February and March 1978 in Los Alamos that a reinforcement of the longer-range TNF was necessary.

In contrast to the U.S. administration, as early as 1975/76 the German authorised experts started to discuss modernisation of the longer-range TNF. Hubertus Hoffmann points out that both the Ford and the Carter administration decided to restrict the range without consulting the German politicians.<sup>85</sup> Kurt Lauk regards the U.S. "refusal" to extend the Pershing's range, although this would be easily accomplished technically, as consistent with their scepticism concerning the use of weapons for a penetration of the Soviet Union:

"Die amerikanische Weigerung, die Reichweite der auch in der Bundesrepublik stationierten 'Pershing' Rakete zu erhöhen - technisch wäre dies leicht möglich - fügt sich hier lückenlos ein."<sup>86</sup>

These statements by German researchers suggest that German politicians attempted to convince the U.S. administration to extend the Pershing's range during 1977 and the first half of 1978, but that the United States declined to yield to these German requests. There is no other evidence for this assumption. It is, however, a fact that Brown's sudden approval of the extension of range demonstrates a considerable change in the conscious policy of the U.S.

---

<sup>83</sup> Aviation Week & Space Technology, (October 23, 1978) p.23

<sup>84</sup> U.S. Department of Defense, Fiscal Year 1980, op.cit., 1979, p.86

<sup>85</sup> Hoffmann, 1986, op.cit. p.412 and 416/417

<sup>86</sup> "The U.S. refusal to extend the range of the 'Pershing' missile - technically this would be easily possible - which is deployed in the Federal Republic belongs in this context." Emphasis by S.P., Kurt J. Lauk, Die nuklearen Optionen der Bundesrepublik Deutschland (Berlin: Duncker & Humblot, 1979), p.134



administration, which had previously insisted to maintain the shorter range of the Pershing.

### **9.2.2. Land deployment versus sea deployment**

NATO's decision to deploy the LRTNF on European soil instead of at sea provoked considerable public dispute. However, according to the decision makers, important political motives prevented the LRTNF's deployment at sea.<sup>87</sup> In addition, serious military reasons were advanced, especially by the German strategic experts, although from a purely military view point, that there are strong arguments in favour of sea-basing: mobility and thus relative invulnerability to preemptive destruction. However, if the Germans were seeking weapons to implement their first use model in an optimal way, the land deployment made perfect sense.<sup>88</sup>

The German first use concept requires that the LRTNF must be able to exploit their accuracy and vulnerability which is caused by the land deployment. The vulnerability of land-deployed systems, so the argument goes, would give the Soviet Union an incentive to try and destroy the missiles preemptively, before they themselves would be targeted. Thus after the failure of deterrence, following the military guideline "use-or-lose-them", the missiles would be launched very early in a conflict to prevent their destruction.

Since the weapons were supposed to target Soviet territory, the Pershing II could not be sea-deployed because of range deficiencies. But, there were also important technical reasons for a land deployment.

A selective and flexible, politically controlled employment of nuclear weapons necessitates the greatest possible accuracy of the missiles as well as a functioning and flexible communication and coordination. Missiles launched from submarines and surface ships do not reach an accuracy comparable to that of a land-based missile. There are still technical difficulties in specifying the exact location of a launcher at sea, which is indispensable for the missiles' computer if it is to hit its target accurately.

---

<sup>87</sup> see chapter 6.2.2.

<sup>88</sup> For an elaboration of this argument see Lübke-meier, 1981, *op.cit.*

In 1981, SIPRI evaluated the U.S Loran-C radio navigation system's precision as being capable of determining a submarine's location within a radius of 15 metres. In order to improve this radius, the U.S. global positioning system is evolving into the NAVSTAR system which, since the mid-1980s, has consisted of 18 satellites positioned in three rings of altitudes of 20,000 kilometres.<sup>89</sup>

Even today, the position of the submarines, given by an inertial navigation system, has to be finally determined by a surface navigation system. The resulting necessity for the submarines to surface enhances Soviet chances of detecting them. Sound navigation ranging systems (Sonar techniques) for the submarines' precise positioning are still in the process of development. The requirement of an accurate targeting of mobile systems is almost excluded with sea-launched missiles. But a future solution to this problem will be offered by the cooperation between the satellite navigation system and the cruise missiles' radio navigator computer. Thus, precise targeting of mobile systems with sea-launched missiles will obviate land deployment in the future. However, for the time being a submarine can only be vaguely located to the extent that mobile targets cannot be targeted at all and fixed targets only with limited accuracy.<sup>90</sup>

Submarine navigation is the most unresolvable technical problem in the East and the West. In order to receive long wave transmissions, submarines have to be positioned quite close to the surface, thus increasing their vulnerability. Therefore, under the circumstances of war, communication with submarines is difficult, if not impossible.<sup>91</sup>

The successful accomplishment of selective and flexible nuclear strikes is dependent on precise information about the military and political situation. Even targeting mobile systems is almost impossible without a guaranteed functioning communication, because in a more extended battlefield area the Air Force and the Army would have to coordinate their operations. The military need to integrate complex decisions and information from the political leadership and several subordinate command levels without loss of time

---

<sup>89</sup> SIPRI, Stockholm International Peace Research Institute, *World Armaments and Disarmament, SIPRI Yearbook 1981* (London: Taylor & Francis, 1981) p.23

<sup>90</sup> Commander Jörg Owen, *Maritime Aspekte der Sicherheit*, Military Fellow, (Institut für Friedensforschung und Sicherheitspolitik, IFSH Hamburg 1988), unpublished manuscript, p.137/138

<sup>91</sup> Auswärtiges Amt, 1981, *op.cit.*, p.3

excludes any sea deployment of the delivery systems launched against mobile targets.<sup>92</sup> For all kinds of selective employment options, Uwe Nerlich considers land-deployed LRTNF as the only adequate means:

"Unter den derzeitigen Bedingungen aber kommen für selektive Einsätze ausschließlich landgestützte LRTNF in Betracht."<sup>93</sup>

In order to successfully implement the German first use concept, Stratmann discovers another indispensable advantage of land deployment: consistent with his demand that nuclear strikes have to imply understandable limitations for the Soviet Union, he welcomes the fact that land-deployed LRTNF are verifiable for the Soviet Union. Thus, information on type, size and deployment area would be available and NATO could communicate the limitations of its intentions to the Soviet Union.<sup>94</sup> In perfect accordance with this argument is the German refusal of the U.S. offer to assign more Poseidons to NATO: from all surrounding sea-areas, the Poseidon's range would be sufficient to cover the whole Soviet territory; in addition, the Poseidon's MIRV system could contribute to Soviet misunderstandings concerning NATO's intentions.<sup>95</sup>

Stratmann's colleague Uwe Nerlich regards land deployment as an advantage because of its ability to enhance Soviet capability of calculating the risk. As already pointed out, Nerlich welcomes the possibility that Soviet risk assessment would be considerably complicated if faced with the difficult decision whether to destroy those weapons capable of reaching the Soviet Union immediately or whether to start its offensive without preempting them and thus running the risk that those weapons would soon be targeted against its own territory. Nerlich argues that the difficulty in deciding whether or not to destroy Europe while merely preempting these missiles would paralyse Soviet capability to act and thus enhance deterrence.

Land deployment was welcomed by German strategic analysts because it promised to enhance the probability of the implementation of the German first

---

<sup>92</sup> Stratmann, 1982, op.cit., p.55

<sup>93</sup> "Under the current conditions, however, only land-deployed LRTNF can be considered for selective employment options." Nerlich, 1981, op.cit., p.338

<sup>94</sup> This argument is implied in his advocacy of ballistic missiles with their clearly identifiable maximum range. Stratmann, 1982, op.cit., p.66

<sup>95</sup> ibid.

use concept. It was argued that the United States would be much more willing to launch weapons to strike Soviet territory if these weapons by their launching location signal that they do not have "strategic intentions". While sea-deployed systems would not automatically be assigned to the European theatre, a deployment of these escalatory, "quasi strategic", namely Eurostrategic, LRTNF could be a signal to the Soviet Union that their employment would be restricted to a regional conflict scenario:

"Falls die USA annähmen, daß die Unterscheidbarkeit zwischen strategischen und eurostrategischen Bereichen für die UdSSR nicht mehr gewährleistet wäre, könnte sich dies vermindern auf ihre Bereitschaft auswirken, ihr eurostrategisches Potential rechtzeitig einzusetzen."<sup>96</sup>

Kissinger, in his bold style, reaffirms this evaluation by commenting on the LRTNF's land deployment:

"Wenn wir Mittelstreckenwaffen für einen amerikanischen Konflikt mit den Sowjets wollen, dann können wir die besser auf See stationieren. Für amerikanische Zwecke brauchen wir sie nicht nach Europa zu schleppen."<sup>97</sup>

The internal discussion paper circulated by the German Ministry of Foreign Affairs in 1981 strongly advocates land deployment because of its strategic-operational advantages:

- high reliability and precision,
- survivability and mobility,
- high employment readiness, and
- secured communication.

The paper indicates the overall intention of enhancing the credibility of deterrence by achieving these military advantages:

"Sie machen damit auch die Optionen der Allianz zu selektiven Reaktionsmöglichkeiten, die nach Ort, Zeit und Wirkung politisch

---

<sup>96</sup> "If the United States assumed that the difference between strategic and Eurostrategic areas would no longer be guaranteed for the Soviet Union, this could impair U.S. readiness to use its Eurostrategic potential in time." Lübckemeier, 1981, op.cit., p.68

<sup>97</sup> "If we want intermediate-range nuclear weapons to serve an American conflict with the Soviets, then we would prefer to deploy them at sea. For American purposes we do not have to drag them to Europe." Henry Kissinger, Welt am Sonntag (October 1, 1982) p.4

kontrollierbar sein müssen, glaubhaft, und verringern dadurch die Gefahr einer sowjetischen Fehleinschätzung."<sup>98</sup>

As in the case of land deployment of the LRTNFs, the political arguments for non-singularity were supplemented by military explanations: the deployment of land-based LRTNF in several NATO countries instead of in the Federal Republic alone was supposed to increase the Soviets' difficulties in achieving a precise risk assessment in the event of an offensive. The calculation was not very sophisticated: if all LRTNF were planned to be preempted in a disarming strike, several NATO countries would have to be destroyed and escalation would be unbearably increased.<sup>99</sup>

### 9.2.3. Vulnerability

The unavoidable byproduct of land deployment, the vulnerability of the missiles, is not only compatible with the German first use concept, it even supports its implementation. The so-called "use-or-lose" effect, which is caused by the vulnerable deployment mode of the LRTNF, also guarantees that the United States can not misuse the LRTNF as war-fighting weapons, because weapons assigned for fighting a battle and for military-operational denial strikes must be capable of surviving war hostilities for a specific period of time which is contemplated for a prolonged war.

In the face of the potential danger that the United States would be involved in a strategic war because of the land deployment of the LRTNF, the question arises why the United States agreed to this vulnerable basing mode of missiles which possess a range sufficient to reach the Soviet Union.

First of all, it has to be considered that the Pershing IIs' and GLCMs' survivability has been increased in comparison to that of the aircraft which are deployed in Europe as part of the U.S. FBS programme. Strategic analysts who campaign for the TNF's "denial" function viewed the increasing vulnerability of

---

<sup>98</sup> "Thus, they also increase the credibility of the allied selective options, which have to be under political control in regard to geographical area, time and effect, and will thereby reduce the danger of a false assessment on the part of the Soviets." Auswärtiges Amt, 1981, *op.cit.*, p.2

<sup>99</sup> Nerlich, 1981, *op.cit.*, p.338

these fighter bombers as the main reason for new LRTNF.<sup>100</sup> Thus, even this group of analysts preferred land-deployed LRTNF since their survivability was increased to the same level as that of the aircraft. Richard Burt explicitly welcomes the ground- and sea-deployed cruise missile as a means to compensate for the aircraft which is deployed as Quick Reaction Alert aircraft:

"In the European theater, longer-range cruise missiles may offer attractive alternatives to aircraft in the performance of some deep-strike interdiction missions. Armed with either nuclear or non-nuclear warheads, these systems - deployed on land or in European coastal waters - could provide an effective substitute to vulnerable, and, some argue, provocative, Quick Reaction Alert (QRA) aircraft now deployed in such countries as West Germany."<sup>101</sup>

Secondly, the LRTNF's vulnerability was neither conceded nor discussed in German and U.S. governmental statements. Instead, it was pointed out that the missiles' mobility was provided for by their transportation on vehicles:<sup>102</sup>

"Sie sind beweglich und damit im Vergleich zu Flugzeugen und verbunkerten Raketen weit weniger verwundbar."<sup>103</sup>

According to Lothar Rühl the Pershing IIs' and GLCMs' vulnerability cannot be discussed seriously. For him, the question is sufficiently answered with the weapons' dispersed deployment mode in an alarm situation. Therefore a Soviet preemptive strike would only be successful in the absence of a prior crisis, which would be a rather unlikely case.<sup>104</sup>

Critics of the weapons programme argued that the Pershing II's vulnerability would provoke the Soviet Union to launch preemptive strikes. This danger would necessitate the weapons' use at a very early stage of war in order to

---

<sup>100</sup> Michael Higgins and Christopher J. Makins, "Theater Nuclear Forces and 'Gray Area' Arms Control" in Richard Burt, (ed), Arms Control and Defense Postures in the 1980s, (Boulder/Colorado: Westview Press; London, England: Croom Helm, 1982) p.75-96, here 80.

<sup>101</sup> Richard Burt, "Technological Change and Arms Control: The Cruise Missile Case" in Holst/Nerlich, 1977, op.cit. p.179-191 p.183

<sup>102</sup> See for example, ACDA Statement Fiscal Year 1985, op.cit., p.107 and 110

<sup>103</sup> "They are mobile and in comparison to aircraft and hardened silos much less vulnerable." Auswärtiges Amt, Bundesminister der Verteidigung, 1981, op.cit., p.72. See response to a question of the MP Dr.Bard, The Green Party, by Parliamentary State Secretary Würzbach, Bundesdrucksache 10/64 (May 13, 1983) p.40 quoted in Wernicke / Schöll, 1984, p.103

<sup>104</sup> Rühl, 1987, op.cit., p.323

avoid their loss. Mutually imposed time pressure to anticipate the opponent's reaction would result in a situation in which it could no longer be determined which party first launched their weapons. Thus, the Pershing II would contribute to the abolition of the nuclear threshold even before the crisis would escalate, either by being employed or simply by its existence; a conventional war would no longer seem likely.<sup>105</sup>

Daniel Charles, a journalist, confirms that during the seventies there existed a doctrine voiced by "NATO nuclear planners" which deliberately envisaged vulnerability of nuclear weapons and did not abolish these vulnerabilities by following precisely the same logic which had been criticised so vehemently by the opponents of the NATO Dual-Track decision. Since such a preemptive nuclear attack would raise the prospect of a strategic war, these NATO planners argued that the Soviet Union would prefer to refrain from any attack, and that deterrence would thus be strengthened.<sup>106</sup> Such a strategy to deliberately force NATO to be a victim of its own operational imperatives in wartime is fully consistent with the principles of flexible response. Daniel Charles criticises this doctrine:

"Indeed, no strategy of deterrence based on the probable breakdown of control over nuclear forces followed by their suicidal use has any hope of political acceptance in any nation of the Alliance. Such an abdication of political responsibility on the part of NATO's leadership cannot command political support, nor does it deserve any."<sup>107</sup>

But at the same time he concedes that political control will diminish the probability that NATO will implement first use.

Charles' contention is confirmed by the affirmation of Mr. Walsh, then DoD Deputy Director, Strategic and Space Systems, during a Senate Hearing:

"Mr. Smith: Aren't you faced with a Hobson's choice here in which the very survivability of the sea-based weapon is exactly what our allies may find bothersome, because if our weapon is vulnerable and if our troops manning it are vulnerable, it may be an indication of our will to use it?"

---

<sup>105</sup> Wernicke, 1984, *op.cit.*, p.41/42

<sup>106</sup> Charles refers to the Journalist John Barry who provided him with this information. Charles, 1987, *op.cit.*, p.156

<sup>107</sup> *ibid.*, p.157

Mr. Walsh: Yes, Sir.<sup>108</sup>

### Conclusion

The fact is that the LRTNF's land deployment and their deficiencies combined with the omissions in regard to their security, contribute to a high level of vulnerability of the LRTNF, in particular the Pershing II. This vulnerability might necessitate the missiles' early employment in a war and thereby contribute to a considerable escalation of the situation since this would mean crossing the nuclear threshold. Such an early escalation can be regarded as a direct expression of the German first use model. Johan Jorgen Holst confirms that the HLG did not discuss the possibilities of reducing the LRTNF's vulnerability.<sup>109</sup>

The decision on upgrading the Pershing's range to that of strategic weapons in 1978 is the second essential element which corresponds to an optimal implementation of the German first use concept. Statements by German researchers suggest that German politicians attempted to convince the U.S. administration to extend the Pershing's range during 1977 and the first half of 1978 while the United States declined to yield to these German requests. The Defense Secretary's sudden approval of the extension of the range demonstrates considerable change in the conscious policy of the U.S. to restrict the shorter range of the Pershing. The argument here does not suggest that the German representatives' and politicians' guidelines prevailed despite the opposition of U.S. decision makers.

As regards range, however, it seems that U.S. Defense Minister Brown's final approval of range extension was a joint result of the cooperation between SACEUR, the U.S. Army and German strategic experts. In short, it appears that the decision to deploy long-range land-deployed TNF in Europe incorporates predominantly German, and not U.S. guidelines.

---

<sup>108</sup> U.S. Senate Hearings, Authorization for Military Procurement, 1977, op.cit., p.6439

<sup>109</sup> As the vulnerable points, Holst stresses the weapon sites, the alert procedures and the combined system of transportation and start. Holst, 1983, op.cit., pp.516



## **10. Summary and Conclusions**

The thesis demonstrates that, contrary to the widely accepted interpretation, not only the arms control track, but also the deployment track of NATO's 1979 decision was initiated mainly by German politicians. The assumption that the Germans yielded to the United States in acceptance of the deployment track as an act of "burden-sharing" within the alliance can be ruled out simply by considering the extent of the activity and engagement of the German politicians in requesting the U.S. administration to agree to the deployment of LRTNF on European soil. They participated in this decision, sometimes in conflict, sometimes in cooperation with, but they always followed their independent national interpretation of the flexible response strategy.

The existence of an independent German interpretation of NATO's strategy is a consequence of the different geography of the German respectively European allies and the United States. According to their respective geography they stress two different functions inherent in nuclear deterrence: the Europeans and the Germans in particular prefer the punishment function of deterrence, while the United States emphasises its denial function. The result are two different interpretations of flexible response which lead to incompatible perceptions of the role of nuclear weapons which again culminate in two, incompatible first use concepts: the United States prefers first use as late as possible, on a theatre level and to be executed with military effectiveness, while the Germans contemplate first use as early as possible, on the strategic level and as a means to signal the Soviet Union to cease hostilities. NATO's decision to modernise the long-range TNF was intended to reconcile these different interpretations of flexible response.

### **10.1. Germany's role in the evolution of the LRTNF decision in the NPG and SALT**

On strategic issues, the Germans were more active than commonly assumed. The German delegates in the Nuclear Planning Group participated actively by drafting several reports in cooperation with their British and U.S. allies aiming at an elaboration of options for implementing flexible response. The extent of leeway in the NPG is indicated by several conflicts, which the German politicians risked and in which they even prevailed.

The strategy of flexible response was continuously elaborated by the NPG's elaboration of selective employment plans for Theatre Nuclear Forces. German participation always accompanied these discussions and elaborations of the development of the strategy of flexible response. The provision of the material basis for these selective employment options necessitated a modernisation of nuclear weapons along the lines of increased penetration capability, accuracy, survivability, reliability and low yield warheads which do not produce much collateral damage. Then detailed plans for using these weapons had to be developed. By requesting the development of nuclear weapons with a small and clean warhead, i.e. the neutron warhead, in combination with low collateral damage, the Germans, in accordance with their European allies, even stimulated this process elaborating the plans for the selective use of nuclear weapons. While the original German doctrine envisages first use with purely political intentions, the process of elaborating selective employment options necessarily led to the European acceptance of first use's military implications.

While U.S. and European politicians still debated over the content of SALT II, in the NPG and HLG the NATO allies' elaboration of selective employment plans produced an agreement on modernisation plans for longer-range theatre nuclear weapons to be deployed in Europe. The reluctance of the U.S. administration to approve the HLG's plan, in particular the opposition of U.S. Defense Secretary Brown, was finally overridden by the U.S. politicians' desire to reestablish U.S. leadership, which had been doubted by the Europeans after the neutron bomb debacle.

Parallel to the German participation in the elaboration of Selective Employment Plans for TNF in the NPG, German politicians lobbied to maintain and consolidate the option of European-based long-range U.S. theatre nuclear weapons in the context of SALT. Their interest focused on the newly produced cruise missile. They were concerned that these LRTNF deployed on European soil could be sacrificed by the United States to achieve SALT agreements. In SALT I the Germans requested that the United States exclude the FBS from the negotiations; in SALT II they pressed for a preservation of the long-range ground- and sea-launched cruise missile.

The cruise missile was welcomed by the Europeans in a conventional role, as a replacement for aging fighter bombers, as well as in a nuclear role in which the

missile would penetrate Soviet territory much more reliably than the FBS aircraft. However, after the withdrawal of the Thor, Jupiter, and Mace B missiles in the sixties, the Carter administration was more than reluctant to yield to these European requests to redeploy modern LRTNF in Europe. Consensus in all departments of the Carter administration was interest in the air-launched cruise missile for its strategic bombers and therefore willing to comply with Soviet requests to ban the ground- and sea- launched cruise missile. While a protocol to SALT II eventually banned deployment of ground- and sea-launched cruise missiles for a period of three years, however, it still allowed their development and testing. In the first case, the result was exactly what the Germans wanted, in the second case, German doctrines were also upheld.

### 10.2. Germany and the implementation of the 1979 decision

In the HLG's shaping of the deployment decision a predominance of German doctrines is evident with respect to the political as well as to the military aspects.

Politically the Germans prevailed in the question of the participation of other NATO allies in the deployment programme and in the second of the two tracks, they enforced the parallel arms control offer to the Soviet Union. The case of land deployment is more ambiguous than the other issues. In public the eventual land deployment of the LRTNF was generally perceived as a defeat for Helmut Schmidt by missile opponents. It was well-known that Schmidt attempted, at least, to deploy the weapons at sea. This attempt was interpreted as Schmidt's intention to protect the Federal Republic from the greatest evil by trying to prevent turning the country into a large target area for Soviet missiles. However, Schmidt's proposal to deploy the missiles on herring trawlers was primarily meant to enlarge the participation of coastal nations such as Norway and Portugal. While Schmidt failed with his plan, since Norway and Portugal rejected it, the eventual participation of the Netherlands and Belgium may be ascribed explicitly to the active role of the Federal Republic. When Schmidt realised that his plan to increase the number of participants by the missiles's sea deployment would not work, he quickly dropped the idea.

However, the result of this failure, the eventual land deployment of the systems, cannot be interpreted as a defeat of the German doctrine. First, because

land deployment protected the Federal Republic in a political sense from having a unique role as the only country to deploy land-based systems and from the consequence of deteriorating relations with the Soviet Union. The Federal Republic was the only country to deploy the Pershing II (which requires deployment as far forward as possible, due to its task of hitting the Soviet Union while having a range of only 1,800 kms.) Therefore, almost all NATO allies were excluded from deploying the Pershing. (Considering their geographical positions Norway and Denmark could have deployed the Pershing II, but preferred to maintain their denuclearised status; Italy might have been excluded because it had already deployed GLCM.) Thus, land deployment of the cruise missile was the only way to avoid German singularity in land-basing nuclear weapons - certainly an extremely unattractive prospect in both military and political terms. This might have been one reason why the German delegation did not pursue sea-basing.

However, the land deployment also possessed another, much more important military dimension. Both U.S. and German strategic experts involved in the decision, welcomed land deployment as a means for implementing selective employment options effectively, since missiles launched from land hit their targets with greater accuracy than those deployed at sea. However, it is striking that the vulnerability of the missiles which is caused by their exposed land deployment was criticised heavily in the U.S. strategic community, while the German strategic experts hardly discussed the problem. These incompatible positions towards vulnerability reflect the difference of roles which the U.S. and German assign to the LRTNF: while the U.S. prefers to maintain the missiles as long as possible for follow-on use, the German strategic experts envisage the missiles' role in first use or, in case of its failure for second use. In this context their vulnerability is welcomed by the Germans as a trigger for first use along the lines of "use or lose them".

Statements by German researchers suggest that German politicians tried to convince the U.S. administration of the necessity to extend the Pershing's range. During 1977 and the first half of 1978 the U.S. administration maintained its position of keeping the Pershing's range limited to that of the Pershing 1A model. It seems that U.S. Defense Secretary Brown's final approval of the extension of the Pershing's range which followed soon after the neutron bomb, was a result of joint requests from SACEUR, the U.S. Army and German politicians. Thus German politicians are responsible for these two preeminent

characteristics of the 1979 deployment decision, namely the missiles' unnecessarily vulnerable land deployment and their long range.

Land-deployed LRTNF were regarded by German strategic experts and politicians as implementing the German first use concept in an optimal way. The targeting of the Soviet Union within NATO first use at an early stage in the war, i.e. before a possible collapse of conventional defences, is regarded by the German strategic experts as the best means for preventing a battlefield nuclear war as well as a long and protracted conventional war on German territory. These nuclear strikes within a first use concept are supposed to signal to the Soviet Union very early in the conflict that NATO is willing to prevent a political defeat for the Alliance by taking a high risk and escalating the war. These risky escalating strikes are justified by the underlying idea of "coupling", which assumes that the involvement of Soviet territory would be followed by a Soviet retaliation against the United States. Thus, deterrence is supposed to be reestablished.

Those strategic experts who campaign for this first use concept do not discuss realistic expectations of Soviet behaviour accomplishment of NATO's first use against Soviet territory. They neither provide evidence to support the assumption that the Soviet Union would retaliate against the United States and thus risk its own complete destruction nor do they provide arguments for the expectation of the Soviets' withdrawal after first use. Only Lothar Rühl states explicitly that the LRTNF's were deployed precisely in order to obviate the use of U.S. strategic weapons. Thus it was possible to reconcile the different German and U.S. requirements for a modernisation of long-range theatre nuclear weapons in both nations' aim at achieving the means for escalation control.

The fact that the German strategic experts do not discuss the issue and thus fail to provide arguments in favour of the crucial premise of the German first use concept - the functioning of either coupling or deliberate escalation - suggests the theoretical inconsistency in the first use concept. While on a declaratory level always stating that a limited war would never and under no circumstances be tolerated, on an operational level German strategic experts aim at the early termination of war precisely by means of a limited nuclear war, including but not limited to German territory. Even if the German interpretation of flexible response prevails, as in the case of the 1979 land

deployment of LRTNF, the strategic dilemma is not solved for the Federal Republic. Since no outcome of a conflict can guarantee safety from the unbearable destruction of Germany, the Federal Republic's strategic dilemma is inherently unresolvable.

### **10.3. The 1979 NATO decision as Background to the INF treaty**

The results of the present analysis will now be incorporated in an attempt to explain the background of the INF treaty. As has been demonstrated above, the LRTNF deployment cannot be interpreted as being a result of U.S. plans to use them as an indispensable element of a counterforce and first strike strategy, or to fight and win a nuclear war in Europe.

However, these U.S. counterforce plans were contemplated only with respect to strategic weapons and did not envisage the incorporation of weapons such as the Pershing II and the cruise missile which would have required discussions with the allies concerning their release which might have been launched without any political control.

On another level, these strategic war-fighting plans themselves seem to have been put on ice, until the accomplishment of SDI can secure that these plans do not end in death for the United States after a retaliatory strike by the Soviet Union; or to put it another way: one can state that the recognition of SDI's insufficiencies and long lead time for development and deployment have furthered the tendency in U.S. strategy to fight and decide a war preferably with conventional means, thus reducing the cost of an INF treaty. In the U.S. strategic community, the assessment now seems to prevail that effective nuclear crisis management is difficult to accomplish and that there is no feasible effective control of nuclear weapons' escalating impact. Most of all, the analyses dreading "nuclear winter" denied the possibility of controlled implementation of a follow-on use, caused an awareness of the uncontrolled dangers of nuclear weapons. <sup>1</sup>

---

<sup>1</sup> Recent studies underline the potentially disastrous effects of a nuclear conflict, like the July 1987 MIT analysis which calculates that a limited Soviet attack on key industries, in particular those of the energy sector with only 1-2% of its arsenal, could bomb the United States back to medieval life conditions. Frankfurter Rundschau, July 22, 1987

New technological developments enable the military to offer a remedy for this problem by replacing nuclear weapons with highly-explosive precision-guided, more accurate conventional weapons. This trend is also confirmed by the increased emphasis on systems with dual capability.<sup>2</sup> Conventional weapons improve the control of escalation in a war and thus guarantee that the conflict will be geographically limited. This tendency toward "conventionalisation" is clearly recognisable in the development of U.S. strategy and is expressed in the ALB doctrine of the U.S. Army and the maritime strategy of the U.S. Navy and Marine Corps, as well as in the concept of air superiority of the U.S. Air Force. These concepts do not, however, renounce the use of nuclear weapons which will play, on an operational level, an important part in future war scenarios. The ALB concept explicitly favours the "integrated battlefield" with an employment of nuclear, chemical, electronic and conventional weapons. In particular NATO's approval of the FOFA concept in 1984 can be interpreted as a first step towards the incorporation of the U.S. Army's ALB doctrine into NATO strategy.

The 1988 U.S. Commission report, "Discriminate Deterrence," providing an "integrated long-term strategy", highlights the way in which the nuclear and conventional components would be synthesised in the future to implement these underlying intentions of U.S. strategy. The report proposes "a capability for counterforce operations deep into enemy territory"<sup>3</sup>. At the same time "(t)he Alliance still needs an ability to use nuclear weapons effectively and discriminately."<sup>4</sup> The report finally admits the collapse of extended deterrence, and states the future role of nuclear weapons as mainly an instrument for denying success to invading Soviet forces. For the implementation of these plans the U.S. has to assert its conventionalised strategy within NATO.

In these kinds of U.S. scenarios weapons such as the Pershing II and the ground-launched cruise missile are an anachronism. Due to their ability to hit the Soviet Union in combination with their exclusively nuclear warhead, U.S. analysts consider them as too escalatory for war-fighting concepts. Another

---

<sup>2</sup> The Defense Department is developing a new non-nuclear cruise missile with greater accuracy and range. Pentagon talks about a CEP near zero. Inside the Pentagon, September 25, 1987.

<sup>3</sup> Discriminate Deterrence, 1988, op.cit. p.2

<sup>4</sup> ibid, p.30

factor is that, although the U.S. clearly dominates the release procedures, it still would have to deal with its European allies, who in case of the real event of war might prefer not to test how the Soviet Union reacts to these escalatory strikes. Most of all the missiles' clear first use implication, generated by their vulnerability and the resulting necessity to use them very early, fits neither with concepts of controlled war-fighting nor with the idea of holding them as a reserve for second strikes in a prolonged conventional-nuclear war.

Concepts of nuclear strikes on a Eurostrategic level as preferred by German strategic experts are not always in the interest of the United States. At the October 1986 Gleneagles Nuclear Planning Group (NPG) meeting, where the 1969 "Provisional Political Guidelines" were made more specific by the "General Political Guidelines" on the first and follow-on use of nuclear weapons, it seems that the German guidelines predominated and will be kept in the foreseeable future. The NPG agreed that "(i)nitial use of nuclear weapons...would be made mainly on the territory of the aggressor, including the Soviet Union."<sup>5</sup> Although the NPG recommendations are not binding, there was an element of obligation to follow the German-first use guidelines due to the "use or lose" nature of the ground-based weapons. There are many more TNFs left which would be able to carry out such strikes, but they do not force an urgent action to such extent as ground-launched TNF do. Thus, U.S. interests in maintaining a wider option on first use, and, if so, only on a battlefield level, prevailed de facto. After the scrapping of Pershing II and the GLCM, has been accomplished, the realisation of the U.S. interpretation of flexible response (no-first use, follow-on use starting out at the battlefield level) will meet with fewer obstacles within NATO in the event of war.

There is no doubt that the option of threatening key Soviet military targets with fast and accurate missiles was certainly tempting to U.S. military men. But in the foreseeable future technical improvements in satellite navigation will obviate the need for cruise missiles to be deployed on land in order to secure sufficient accuracy. In the future, cruise missiles based at sea will also provide the accuracy to reliably target even mobile follow-on forces of the Warsaw Pact.

The fact that in the early eighties the Reagan administration deployed missiles which were not even technically operational, although several key officials

---

<sup>5</sup> Lothar Rühl, 1987a, op.cit., p.19



within the administration<sup>6</sup> expressed considerable doubts, has to be seen in a political - psychological context. With the rise of the peace movement and the unexpected public uproar over the missiles' deployment, European leaders preferred to withdraw from their recent commitment to deploy the weapons on their soil in fear of losing votes in elections. The same people who had asked for the LRTNF now requested the United States to start arms control negotiations and to delay the deployment in order to appease the public. The United States defied these plans for postponement, since it was not willing to yield to contradictory European requests a second time and to slow down a process of production and deployment shortly after having started it. Thus the peace movement contributed to the decisiveness with which the weapons were deployed by the United States. In this context Schlesinger's statement seems to have been warranted when he accused European leaders of "hypocrisy for letting the missile plan be portrayed as a U.S. initiative and perhaps a plan to reduce the nuclear risk to the United States."<sup>7</sup>

In 1987 Reagan decided to crown his term of office with an arms control agreement. U.S. analysts certainly did not suffer too much when they had to sacrifice the Pershing II and GLCM, particularly in view of the loophole in the treaty which allows deployment of long-range theatre nuclear weapons on sea and in air. Thus it would be surprising if the United States were not to exploit this loophole extensively. However, the conclusions of this work warn against a quick accusation of the U.S. for already trying to undermine the INF treaty. One has to examine which of the U.S. allies supports these plans behind the scenes. Lothar Rühl, who retired from his office as State Secretary at the end of 1988, drafted a paper for Defence Minister Wörner as early as March 1988, i.e. three months after the INF treaty, in which he recommends that air-launched cruise missile and fighter bombers equipped with air-to-surface stand-off weapons be considered:

"Es handelt sich dabei nicht um einen Ersatz für die land-gestützten LRINF-Systeme oder um eine Kompensation, die das INF-Abkommen aushöhlen, umgehen und also neutralisieren soll, sondern um die Nutzung der von diesem Abkommen freigelassenen Möglichkeiten, flexible und selektive

---

<sup>6</sup> Strobe Talbott convincingly describes the doubts of some influential politicians over the necessity of the weapons programme, see Talbott, 1984, op.cit.

<sup>7</sup> "Schlesinger Criticizes U.S. Allies on Missiles", International Herald Tribune, May 26, 1981

Nuklearoptionen für die Eskalation mit regionalen Nuklearstreitkräften bereitzuhalten."<sup>8</sup>

Although not optimal, air launched LRTNF are still the second best solution for the German interpretation of flexible response since these weapons still are for use against the USSR.

In light of the fact that West-Germany is a non-nuclear NATO ally, the Federal Republic's strategic policy so far has been interpreted to a too large extent only with reference to U.S. hegemonic policy. If this view is not going to be qualified in the future, those political forces in the Federal Republic which disagree with the status quo of security policy will continue to address their policy requests to the wrong party, i.e. the United States, and spare their own government, i.e. the Federal Republic, from justified criticism. This is not only counterproductive in a political sense, but even to a certain extent ridiculous. German politicians preferred to evade a public discussion about the issue and distracted the public on the level of bean counting of the missiles, since an analysis of the contradictions and dilemmas inherent in flexible response would have called the strategy's merit considerably into question.

---

<sup>8</sup> "This is not to be regarded as a replacement for land-deployed LRINF systems or a compensation which modernises, circumvents and thus neutralises the INF treaty, but as an exploitation of the opportunities opened up by this treaty permitting the choice of flexible and selective nuclear options for escalation with regional nuclear forces." Lothar Rühl to Defence Minister Wörner, Internal Study, Stabilität und konstruktive Beziehungen in Europa. Entwurf eines Konzepts für eine strategisch gedeckte Sicherheitspolitik. (Bonn: March, 17, 1988) made available to me by a free-lance journalist

**Abbreviations**

|                       |  |
|-----------------------|--|
| <b>ABM</b>            | <b>Anti Ballistic Missile</b>                            |
| <b>ACDA</b>           | <b>Arms Control and Disarmament Agency</b>               |
| <b>ACE</b>            | <b>Allied Command Europe</b>                             |
| <b>ADM</b>            | <b>Atomic Demolition Mines</b>                           |
| <b>AFCENT</b>         | <b>Allied Forces Central Europe</b>                      |
| <b>AFNORTH</b>        | <b>Allied Forces Northern Europe</b>                     |
| <b>AFSOUTH</b>        | <b>Allied Forces Southern Europe</b>                     |
| <b>ALB</b>            | <b>Airland Battle</b>                                    |
| <b>ALCM</b>           | <b>Air Launched Cruise Missile</b>                       |
| <b>ASW</b>            | <b>Anti Submarine Warfare</b>                            |
| <b>C<sup>3</sup>I</b> | <b>Command Control Communications and Intelligence</b>   |
| <b>CDU</b>            | <b>Christian Democratic Union, West Germany</b>          |
| <b>CENTAG</b>         | <b>Central Army Group, Central Europe</b>                |
| <b>CEP</b>            | <b>Circular Error Probable</b>                           |
| <b>CFE</b>            | <b>Conference on (armed) Forces Europe</b>               |
| <b>CIA</b>            | <b>Central Intelligence Agency</b>                       |
| <b>CINCHAN</b>        | <b>Commander-in-Chief Channel and Southern North Sea</b> |
| <b>CINCPAC</b>        | <b>Commander-in-Chief Pacific</b>                        |
| <b>CMF</b>            | <b>Conceptual Military Framework</b>                     |
| <b>CNAD</b>           | <b>Conference on National Armament Directors</b>         |
| <b>CSCE</b>           | <b>Conference on Security and Cooperation in Europe</b>  |
| <b>CSU</b>            | <b>Christian Social Union, West Germany</b>              |
| <b>DCA</b>            | <b>Dual Capable Aircraft</b>                             |
| <b>DDR&amp;E</b>      | <b>Directorate Defense Research and Engineering</b>      |
| <b>DEW</b>            | <b>Directed Energy Weapons</b>                           |
| <b>DoD</b>            | <b>Department of Defense</b>                             |
| <b>DPC</b>            | <b>Defense Planning Committee</b>                        |
| <b>DSARC</b>          | <b>Defense Systems Acquisition Review Council</b>        |
| <b>EMP</b>            | <b>Electro Magnetic Pulse</b>                            |
| <b>ERW</b>            | <b>Enhanced Radiation Weapon</b>                         |
| <b>ET</b>             | <b>Emerging Technologies</b>                             |
| <b>EWP</b>            | <b>Emergency War Plan</b>                                |
| <b>FBS</b>            | <b>Forward Based Systems</b>                             |
| <b>FEBA</b>           | <b>Forward Edge of the Battle Area</b>                   |

|                |  |
|----------------|--|
| <b>FM</b>      | <b>Field Manual</b>                                    |
| <b>FOFA</b>    | <b>Follow-on Forces Attack</b>                         |
| <b>FRG</b>     | <b>Federal Republic Germany</b>                        |
| <b>FY</b>      | <b>Fiscal Year</b>                                     |
| <b>GDR</b>     | <b>German Democratic Republic</b>                      |
| <b>GLCM</b>    | <b>Ground Launched Cruise Missile</b>                  |
| <b>GPG</b>     | <b>General Political Guidelines</b>                    |
| <b>GSP</b>     | <b>General Strike Plan</b>                             |
| <b>HLG</b>     | <b>High Level Group</b>                                |
| <b>ICBM</b>    | <b>Intercontinental Ballistic Missile</b>              |
| <b>IISS</b>    | <b>International Institute for Strategic Studies</b>   |
| <b>INF</b>     | <b>Intermediate Range Nuclear Forces Treaty</b>        |
| <b>IOC</b>     | <b>Initial Operational Capability</b>                  |
| <b>IRBM</b>    | <b>Intermediate Range Ballistic Missile</b>            |
| <b>JCAE</b>    | <b>Joint Congressional Atomic Energy Committee</b>     |
| <b>JCS</b>     | <b>Joint Chiefs of Staff</b>                           |
| <b>JSOP</b>    | <b>Joint Strategic Operations Plan</b>                 |
| <b>JSTPS</b>   | <b>Joint Strategic Target Planning Staff</b>           |
| <b>LNO</b>     | <b>Limited Nuclear Option (also Strategic)</b>         |
| <b>LRTNF</b>   | <b>Long Range Theater Nuclear Forces</b>               |
| <b>LTDP</b>    | <b>Long Range Defense Program</b>                      |
| <b>MAD</b>     | <b>Mutual Assured Destruction</b>                      |
| <b>MARV</b>    | <b>Maneuverable Re-entry Vehicle</b>                   |
| <b>MBFR</b>    | <b>Mutual and Balanced Force Reductions</b>            |
| <b>MC</b>      | <b>Military Committee</b>                              |
| <b>MIRV</b>    | <b>Multiple Independently-Targeted Reentry Vehicle</b> |
| <b>MIT</b>     | <b>Military Implications</b>                           |
| <b>MLF</b>     | <b>Multi Lateral Force</b>                             |
| <b>MMRBM</b>   | <b>Mobile Medium Range Ballistic Missile</b>           |
| <b>MRBM</b>    | <b>Medium Range Ballistic Missile</b>                  |
| <b>NAA</b>     | <b>North Atlantic Assembly</b>                         |
| <b>NATO</b>    | <b>North Atlantic Treaty Organization</b>              |
| <b>NCA</b>     | <b>National Command Authorities</b>                    |
| <b>NDAC</b>    | <b>Nuclear Defense Affairs Committee</b>               |
| <b>NOP</b>     | <b>Nuclear Operations Plan</b>                         |
| <b>NORTHAG</b> | <b>Northern Army Group</b>                             |
| <b>NPG</b>     | <b>Nuclear Planning Group</b>                          |
| <b>NSC</b>     | <b>National Security Council</b>                       |

|                |  |
|----------------|--|
| <b>NSDM</b>    | National Security Decision Memorandum            |
| <b>NSTL</b>    | National Strategic Target List                   |
| <b>NTPR</b>    | National Targeting Policy Review                 |
| <b>NUWEP</b>   | Nuclear Weapons Employment Policy                |
| <b>NWRS</b>    | Nuclear Weapons Requirement Study                |
| <b>NYT</b>     | New York Times                                   |
| <b>OTA</b>     | Office of Technology Assessment                  |
| <b>PAL</b>     | Permissive Action Link                           |
| <b>PD</b>      | Presidential Directive                           |
| <b>PGM</b>     | Precision Guided Munitions (also Missiles)       |
| <b>PIT</b>     | Political Implications                           |
| <b>POC</b>     | Program of Cooperation                           |
| <b>PPG</b>     | Provisional Political Guidelines                 |
| <b>PRM</b>     | Presidential Review Memorandum                   |
| <b>PSG</b>     | Political Study Group                            |
| <b>PSP</b>     | Priority Strike Plan                             |
| <b>PTP</b>     | Possibility to Penetrate                         |
| <b>QRA</b>     | Quick Reaction Alert                             |
| <b>RUSI</b>    | Royal United Strategic Institute                 |
| <b>RV</b>      | Re-entry Vehicle                                 |
| <b>SAC</b>     | Strategic Air Command                            |
| <b>SACEUR</b>  | Supreme Allied Commander Europe                  |
| <b>SACLANT</b> | Supreme Allied Commander Atlantic                |
| <b>SALT</b>    | Strategic Arms Limitation Talks                  |
| <b>SCC</b>     | Special Coordinating Committee                   |
| <b>SCG</b>     | Special Consultative Group                       |
| <b>SDI</b>     | Strategic Defense Initiative                     |
| <b>SEP</b>     | Selective Employment Plan                        |
| <b>SG</b>      | Special Group                                    |
| <b>SHAPE</b>   | Supreme Headquarter Allied Powers Europe         |
| <b>SICBM</b>   | Small Intercontinental Ballistic Missile         |
| <b>SIOP</b>    | Single Integrated Operational Plan               |
| <b>SIPRI</b>   | Stockholm International Peace Research Institute |
| <b>SLBM</b>    | Sea Launched Ballistic Missile                   |
| <b>SLCM</b>    | Sea Launched Cruise Missile                      |
| <b>SNO</b>     | Selective Nuclear Option (also LNO)              |
| <b>SNF</b>     | Strategic Nuclear Forces                         |
| <b>SPD</b>     | Social Democratic Party of Germany               |

|                |   |
|----------------|---|
| <b>SRTNF</b>   | Short Range Tactical (Theater) Nuclear Forces (below 500km) |
| <b>SRTNW</b>   | Short Range Tactical (Theater) Nuclear Weapon (below 500km) |
| <b>SSBN</b>    | Submersible Ballistic Nuclear                               |
| <b>START</b>   | Strategic Arms Limitation Talks                             |
| <b>TACWP</b>   | Tactical Working Party                                      |
| <b>TNF</b>     | Tactical (Theater) Nuclear Forces                           |
| <b>TNW</b>     | Tactical (Theater) Nuclear Weapons                          |
| <b>TRADOC</b>  | Training and Doctrine Command                               |
| <b>TSP</b>     | Tactical Strike Plan  |
| <b>USAF</b>    | United States Air Force                                     |
| <b>USAREUR</b> | US Armed Forces Europe                                      |
| <b>WP</b>      | Warsaw Pact   |
| <b>WTO</b>     | Warsaw Treaty Organisation                                  |

### Glossary<sup>1</sup>

**ADM.** Atomic Demolition Munitions. Manually emplaced mines producing nuclear explosions used to create land barriers in the path of enemy forces.

**Ballistic missile.** Missile which follows a ballistic trajectory (part of which is outside the Earth's atmosphere) when thrust is terminated.

**Bargaining chip.** Actual or projected weapons system the purpose of which is to gain some form of concession in arms control negotiations.

**CEP.** Circular error probability. A measure of missile accuracy: the radius of a circle, centered on the target, within which 50 percent of the weapons aimed at the target are expected to fall.

**Collateral Damage.** Unintended damage to civilian facilities (population centres, roads, bridges, railroads, dams, etc.) or casualties to civilian personnel incurred as a consequence of a nuclear strike against a different, usually military, target.

**Conventional weapons.** Weapons not having mass destruction effects.

**Counterforce.** A nuclear strategy in which the attack missiles are aimed at the opponent's military forces.

**Countervailing.** Another name for counterforce used in Presidential Directive Number 59 (PD-59) to connote a limited nuclear exchange as opposed to a disarming first strike.

---

<sup>1</sup> This Glossary is based on the following sources:

World Armaments and Disarmament. SIPRI Yearbook 1982, (London: Taylor & Francis, 1982; Donald M. Snow, Nuclear Strategy in a Dynamic World. American Policy in the 1980s, (Alabama : The University of Alabama Press, 1981); Aldridge, 1983, op.cit.; Planning U.S. General Purpose Forces, 1977, op.cit.; U.S. Department of Defense, Dictionary, 1974, op.cit.,

**Countervalue.** A nuclear strategy in which the attack missiles are aimed at the opponent's value targets- cities and industrial areas.

**Cruise missile.** Missile which can fly at very low altitudes (and can be programmed to follow the contours of the terrain) to minimise radar detection. It can be air-, ground- or sea-launched and carry a conventional or a nuclear warhead.

**Damage limitation.** Defensive planning to minimise the physical damage incurred as a result of nuclear exchange.

**Deterrence.** A nuclear strategy whereby a potential aggressor is "deterred" from attacking because of the massive and unacceptable retaliation that will follow.

**EMP.** ElectroMagnetic Pulse. A high voltage generated in missile and reentry vehicle circuitry when travelling through the environment of a nuclear explosion.

**EP.** Earth Penetrator. A device that mechanically buries a nuclear warhead in the ground before detonation. It could be used to create physical barriers to enemy military operations, to destroy hardened enemy targets, or to conduct nuclear strikes that require the confinement of nuclear effects to the ground.

**Fall-out.** Particles contaminated with radioactive material as well as radioactive nuclides, descending to the Earth's surface following a nuclear explosion.

**FBS.** Forward-based systems - American nuclear weapons capabilities stationed in Europe capable of attacking targets in the Soviet Union.

**First strike capability.** The capacity to launch a preemptive strike against an enemy and in the process destroy the enemy's second strike forces.

**First strike strategy.** The intention to fire one's nuclear weapons before absorbing a similar attack.



**Fission.** Process whereby the nucleus of a heavy atom splits into lighter nuclei releasing substantial amounts of energy. At present the most important fissionable materials are uranium-235 and plutonium-239.

**Fractricide.** The destructive effect, from debris, EMP, etc., of a nuclear explosion on subsequently incoming warheads.

**Fusion.** Process whereby light atoms, especially those of the isotopes of hydrogen-deuterium and tritium-combine to form a heavy atom with the release of very substantial amounts of energy.

**Honest John.** A short-range, unguided, truck-mounted rocket intended to deliver a nuclear weapon against enemy combat forces. Being phased out of the U.S. inventory.

**ICBM.** Intercontinental Ballistic Missile. A land-based missile capable of delivering nuclear weapons in an intercontinental range (in excess of 5,500 km).

**Interdict.** To isolate, or seal off an area by any means; to deny the use of a route or approach.

**IRBM.** Intermediate Range Ballistic Missile. A land-based missile capable of delivering nuclear weapons to ranges between 2,400 and 5,500 km.

**Lance.** A newer short-range inertially-guided tactical missile, mounted on a tracked vehicle or trailer, capable of delivering a nuclear weapon against enemy combat forces.

**Launcher.** Equipment which launches a missile. ICBM launchers are land-based launchers which can be either fixed or mobile. SLBM launchers are missile tubes on submarines.

**LRTNF.** Long-Range theatre nuclear forces: TNF with a range between 1,000 and 5,500 kms.

**MARV.** Manoeuvrable reentry vehicle. Reentry vehicle whose flight can be adjusted so that it may evade ballistic missile defences and/or acquire increased accuracy.

**MBFR.** Mutual and Balanced Force Reductions talks. Negotiations between NATO and the Warsaw Pact representatives concerning troop reductions in Europe.

**Medium-range nuclear weapons.** Soviet designation for long-range theatre nuclear weapons.

**Mt.** Megaton. Measure of the explosive yield of a nuclear weapon equivalent to one million metric tons of trinitrotoluene (TNT) high explosive.

**MIRV.** Multiple Independently Targetable Reentry Vehicles. Two or more reentry vehicles carried by a single missile and capable of attacking different, separate targets.

**NAVSTAR.** The U.S. global positioning system of satellites being at present developed.

**NCA.** National Command Authority. The U.S. national political decisionmakers responsible for commanding the use of U.S. nuclear forces. The group comprises the President, the Secretary of Defense, and their designated successors.

**Nike-Hercules.** A ground-launched anti-aircraft missile system capable of using nuclear or conventional explosives.

**NOP.** Nuclear Operations Plan. The plan is developed by the Supreme Allied Commander Europe (SACEUR), for the execution of nuclear strikes with the nuclear weapons under his command.

**PAL.** Permissive Action Link. A coded device attached to nuclear weapons deployed abroad that impedes the unauthorised arming or firing of the weapon.

**PGM.** Precision Guided Munition. A bomb or missile capable of being guided during the terminal phase of its trajectory with a 50 percent or greater probability of making a direct hit on its intended target.

**POC.** Program of cooperation. The United States deploys and controls the warheads of those delivery systems which are owned and operated by the European allies. Such custody is also referred to as "dual-key system".

**Poseidon.** The second generation of U.S. SLBM-carrying submarines. Successor to Polaris.

**PSP.** Priority Strike Program. A plan that provides for the delivery of nuclear strikes against the highest priority targets in the NOP.

**QRA.** Quick Reaction Alert. A condition in which specified numbers of aircraft and Pershing missiles are readied to deliver designated nuclear strikes on very short notice.

**RADAG.** Radar Area Correlator Guidance. A guidance system that compares a radar image of terrain along the reentry vehicle's flight path with an image of the target area stored in an onboard computer and that makes corrections in the reentry vehicle flight to establish correspondence between the two images and thereby to accurately strike the target with the vehicle.

**RV.** Reentry vehicle. Portion of a strategic ballistic missile designed to carry a nuclear warhead and to reenter the Earth's atmosphere in the terminal phase of the trajectory.

**SALT.** Strategic Arms Limitation Talks. Negotiations between the Soviet Union and the United States, initiated in 1969, which seek to limit the strategic nuclear forces, both offensive and defensive, on both sides.

**Second-strike capability.** Ability to survive a nuclear attack and launch a retaliatory strike large enough to inflict intolerable damage on the opponent.

**Sergeant.** A truck-mounted, short-range tactical missile capable of delivering a nuclear weapon against enemy combat forces. Being phased out of the U.S. Inventory.

**SIOP.** Single Integrated Operational Plan. The U.S. plan for the coordinated delivery of nuclear strikes by strategic nuclear forces.

**Strategic Triad.** The combination of land-based intercontinental ballistic missiles, intercontinental bombers and cruise missiles, and submarine-launched ballistic missiles: land, air and sea. Both the U.S. and USSR operate with a strategic triad of nuclear weapons.

**Theatre nuclear Weapons.** Nuclear weapons of a range less than 5,500 kms. Often divided into long-range: over 1,000 kms (e.g. so-called Eurostrategic weapons), medium-range, and short-range: up to 200 kms (also referred to as battlefield nuclear weapons).

**Time Urgent Target.** ICBM silos which would have to be destroyed before they launch their missiles.

**TSP.** Tactical Strike Program. A plan for conducting nuclear strikes against targets in the NOP other than PSP targets.

**Warhead.** That part of a missile, torpedo, rocket or other munition which contains the explosive or other material intended to inflict damage.

**Yield.** Released nuclear explosive energy expressed as the equivalent of the energy produced by a given number of metric tons of trinitrotoluene (TNT) high explosive.

**Chronology of executives involved in the NATO-Dual Track Decision<sup>1</sup>**

September 15, 1949: Election of Konrad *Adenauer* as Chancellor of the Federal Republic.

June 7, 1955: Theodor *Blank* became the Federal Republic's first Minister of Defence.

October 21, 1955: Franz Josef *Strauß* became Head of the newly created Ministry of "Atomic Affairs".

October 16, 1956: Franz Josef *Strauß* took over the office of Minister of Defence.

January 20, 1961: President *Kennedy* was inaugurated as U.S. President.

January 21, 1961: Robert Strange *McNamara* was appointed Secretary of Defense in the cabinet of Kennedy.

October 30, 1961: Minister of Foreign Affairs Heinrich *von Brentano* was succeeded by *Gerhard Schröder*.

December 11, 1962: Franz Josef *Strauß* left the Adenauer cabinet as a result of the "Spiegel-Affair".

January 9, 1963: Kai-Uwe *von Hassel* succeeded *Strauß* as Minister of Defence.

October 16, 1963: Ludwig *Erhard* succeeded Adenauer as Chancellor of the Federal Republic.

<sup>1</sup> The dates of the U.S. Secretaries and Presidents are taken from Robert Sobel, (ed.) Biographical Directory of the United States Executive Branch 1774-1977, (Westport, London: Greenwood Press, 1977) and Congress and the Nation, Volume V 1977-1980. A Review of Government and Politics (Washington, D.C.: Congressional Quarterly, 1981) and Datenhandbuch, 1984, op.cit.

December 1, 1966: after the election Kurt Georg *Kiesinger* became Chancellor of the Grand Coalition, Willy *Brandt* obtained the Ministry of Foreign Affairs, *Schröder* left the Ministry of Foreign Affairs and superseded von Hassel as Minister of Defence.

November 22, 1963: President *Kennedy's* assassination; Lyndon B. *Johnson* was sworn in as President of the United States.

January 18, 1968: Clark McAdams *Clifford* was appointed Secretary of Defense in the cabinet of President Johnson.

February 29, 1968: *McNamara* left his office as U.S. Secretary of Defense.

January 20, 1969: President *Nixon* was elected President and succeeded *Johnson*. Also *Clifford's* end of tenure as Johnson's Secretary of Defense. In the new cabinet of Nixon Melvin R. *Laird* became Secretary of Defense.

September 28, 1969: Election for the 6th Bundestag, the new government was a coalition of the Liberal Party and the Social Democrats.

October 20, 1969: Opening session of the 6th Bundestag, election of *Brandt* as Chancellor, Walter *Scheel* took over the Ministry of Foreign Affairs, Helmut *Schmidt* entered upon the Ministry of Defence.

July 7, 1972: *Schmidt* was succeeded by Georg *Leber* as Minister of Defence. Leber obtained the office until February 1978.

January 29, 1973: Elliot Lee *Richardson's* appointment as Secretary of Defense was confirmed by the U.S. Senate after *Laird's* resignation; he served only three months as Secretary of Defense.

July 2, 1973: James Rodney *Schlesinger* was sworn into office as Secretary of Defense.

August 4, 1973: Henry Alfred *Kissinger* was nominated Secretary of State. (from 1969-1974 he was assistant to President Richard Nixon on national security affairs).

May 16, 1974: Hans-Dietrich *Genscher* became the Head of Ministry of Foreign Affairs.

August 9, 1974: Richard Nixon resigned from the presidency; President Gerald Rudolph *Ford* was sworn in.

November 20, 1975: Schlesinger resigned his post; Donald *Rumsfeld* took office as Secretary of Defense.

January 20, 1977: in the presidential elections President Ford was defeated; as a result Henry Kissinger left his office as Secretary of State and Donald Rumsfeld his as Secretary of Defense. Two days later Jimmy *Carter* was inaugurated as President of the United States. He nominated Harold *Brown* as Secretary of Defense. Cyrus Roberts *Vance* was selected to be Secretary of State in the Carter cabinet.

February 2, 1978: Hans *Apel* entered the Ministry of Defence and succeeded Leber.

April 21, 1980: Secretary of State resigned in protest against the abortive U.S. attempt to rescue Americans held hostage in Iran.

### Bibliography

- Afheldt, Horst. *Verteidigung und Frieden. Politik mit militärischen Mitteln*. München, Wien: Carl Hanser Verlag, 1976.
- Albrecht, Ulrich. *Kündigt den Nachrüstungsbeschluß! Argumente für die Friedensbewegung*. Frankfurt am Main: Fischer Verlag, 1982.
- Albrecht, Ulrich / Galtung, Johan / Gumbert, Michael / Stuckenbrock, Reimar (eds.). *Stationierung - und was dann? Friedensbewegung gegen Apokalypse*. Berlin: Europäische Perspektiven, 1983.
- Aldridge, Robert C.. *First Strike! The Pentagon's Strategy for Nuclear War*. Boston, MA: South End Press, 1983.
- Aldridge, Robert C.. *Erstschlag. die Strategie des Pentagon für den Atomkrieg*. München: Werkhaus-Verlag, 1984.
- Allison, Graham T., "Conceptual Models and the Cuban Missile Crisis", in *Head et.al.(1973)*, pp.273-300.
- Apel, Hans, "Freunde tritt man nicht vors Schienbein", interview in *Der Spiegel*, Vol.35, No.29, (1981), pp.33-41
- Apel, Hans, "Wir sind nicht der 51. Staat der USA", interview in *Der Spiegel*, Vol.37, No.44, (October 31, 1983)
- Arkin, William M.. "Why SIOP-6 ?" *The Bulletin of the Atomic Scientists*, (April,1983), pp.9-10.
- Arkin, William. "Pershing II and U.S. nuclear strategy." *The Bulletin of the Atomic Scientists*, (June/July, 1983a), pp.12-13.
- Arkin, William M. / Fieldhouse, Richard W.. *Nuclear Battlefields. Global Links in the Arms Race*. Cambridge, Massachusetts: Ballinger, 1985.
- Art, Robert J. / Ockenden, Stephen E.. "The Domestic Politics of Cruise Missile Development, 1970-1980." in: *Richard K. Betts (ed.)*, 1981, pp.359-413.
- Auswärtiges Amt. *Internes Argumentationspapier des Auswärtigen Amtes zur See-/Landstationierung der LRTNF v. 22. Mai 1981*. Bonn: Internes Papier, 1981.
- Auswärtiges Amt / Bundesministerium für Verteidigung. *Es geht um unsere Sicherheit*. Bonn: Referate für Öffentlichkeitsarbeit, May 1981a.
- Bahr, Egon. "Ist die Menschheit dabei, verrückt zu werden?" *Vorwärts*, Nr. 29, July 21, 1977.
- Bahr, Egon. *Was wird aus den Deutschen? Fragen und Antworten*. Reinbek bei Hamburg: Rowohlt Verlag, März 1982.



- Ball, Desmond. *Deja vu: The return to counterforce in the Nixon Administration*. Santa Monica: California Seminar on Arms Control and Foreign Policy, December 1975.
- Ball, Desmond. *Politics and Force Levels. The Strategic Missile Program of the Kennedy Administration*. Berkley, Los Angeles, London: University of California Press, 1980.
- Ball, Desmond. "Can Nuclear War Be Controlled ?". Adelphi Papers, No.169. London: International Institute for Strategic Studies, 1981.
- Ball, Desmond. *Targeting for Strategic Deterrence*, Adelphi Paper 185. London: The International Institute for Strategic Studies, 1983.
- Ball, Desmond. "U.S. Strategic Forces. How would they be used ?" *International Security*, Vol.7, No.3 (Winter 1982/83), pp.31-60.
- Barry, John. "Reaveled: The Truth about Labour and Cruise". *The Sunday Times*, February 6, 1983
- Barth, Peter. "Zwischen Vorne- und Vorwärtsverteidigung." *Mediatus*, Vol.4, No.7/8, August 5 (1985).
- Beecher, William. "Major-War Plans are being revised by White House". *New York Times*. August 5, 1972
- Bennett, W.S. / Sandoval, R.R. / Shreffler, R.G.. "A credible nuclear emphasis defense for NATO." *Orbis*, Vol.17, No.2, (Summer 1973), pp.463-479.
- Berg, Per / Herolf, Gunilla. "'Deep strike': new technologies for conventional interdiction." in: *SIPRI, Yearbook 1984*, pp.291-293.
- Berry, F. Clifton Jr.. "Perhsing II. first Step in NATO Theatre Nuclear Force Modernization." *International Defense Review*, No.8, (1979), pp.1303-1308.
- Bertram, Christoph. The Implications of Theater Nuclear Weapons in Europe. *Foreign Affairs*, (Winter 1981/82), pp.305-326
- Betts, Richard K. (ed.). *Cruise Missiles. Technology, Strategy, Politics*. Washington D.C.: The Brookings Institution, 1981.
- Bielfeldt, Carola / Schlotter, Peter. *Die militärische Sicherheitspolitik der Bundesrepublik Deutschland. Einführung und Kritik*. Frankfurt/New York: Campus Verlag, 1980.
- Bittorf, Wilhelm. *Nachrüstung. Der Atomkrieg rückt näher*. Reinbek bei Hamburg: Spiegel-Buch, 1981.
- Bittorf, Wilhelm. "Sie vermehren sich wie die Karnickel", II. *Der Spiegel* (Vol.40, No.44, October 27, 1986, pp.112-129.
- Bobrow, Davis B. (ed), *Components of Defense Policy*. Chicago: Rand McNally & Co., 1965.
- Böckle, Franz / Krell, Gert, (eds.) *Politik und Ethik der Abschreckung. Theologische und sozialwissenschaftliche Beiträge zur Herausforderung der Nuklearwaffen*. Mainz, München: Grünewald und Kaiser, 1984.

- Boston Study Group, The. *Winding Down. The Price of Defense*. San Francisco: W.H. Freeman and Co., 1979.
- Brauch, Hans Günter. *Die Raketen kommen! Vom NATO-Doppelbeschluß bis zur Stationierung*. Köln: Bund Verlag, 1983.
- Bredthauer, Karl D.. "Worin besteht die Gefahr für Europa und wie kann man sie abwenden? Einschätzungen aus amerikanischer und sowjetischer Sicht. Radomir Bogdanow and Daniel Ellsberg im Gespräch mit K.B." *Blätter für Internationale Politik*, Vol.28, No.6, (1983) pp.776-795.
- Bredthauer, Karl D.. "'Enthauptung' als 'Grundlage' der Nuklearstrategie ." *Frankfurter Hefte*, Vol.39, No.7, (1984), pp.13-21.
- Breithaupt, Hans / Kalix, Dieter / Graf Kielmannsegg, J.A. / Stratmann, K. Peter. *Zur Problematik einer Verteidigungsoption für Mitteleuropa in den Achtziger Jahren. Zusammenfassung*. Ebenhausen: Stiftung für Wissenschaft und Politik SWP-S 2023/Z, May 1974.
- Brodie, Bernard. *The Absolute Weapon*. New York: Harcourt, Brace and Co., 1946.
- Brodie, Bernard. *War and Politics*. London: Cassell and Collier Macmillan Publishers, 1973.
- Brown, Harald. "The Objective of U.S. Strategic Forces, Adress by U.S. Secretary of Defense, Harald Brown, August 20, 1980." *Survival*, Vol.22, No.6, November/December, (1980), pp. 267-269.
- Brzezinski, Zbigniew. *Power and Principle. Memoirs of the National Security Adviser 1977-1981*. London: Weinfeld and Nicolson, 1983.
- Buch, Heinrich. "Die Rolle der Bundesrepublik bei SALT - Mitspieler oder Zuschauer?." in: *Haftendorn, et.al. (eds.) 1978*, pp.115-134.
- Buchan, Alastair. "*The Multilateral Force: An Historical Perspective*", Adelphi Papers, No. 13. London: The Institute for Strategic Studies, October 1964.
- Bülow, Andreas von, Undersecretary of State. Answer on the request of MP Mertes, September 20, 1977 German Bundestag. Bonn: *Drucksache 8, 1014*, 1977, pp.3-14.
- Bülow, Andreas von. "Antwort des Paarlamentarischen Staatssekretärs Dr. von Bülow vom 18. August 1977", in *Stichworte zur Sicherheitspolitik*, Bonn. Presse- und Informationsamt der Bundesregierung, No.11, (November, 1977a), pp.10.
- Bülow, Andreas Dr. von. "Problematik eines Kräftevergleichs zwischen NATO und Warschauer Pakt." *Soldat und Technik*. No.6, (1979), pp.289-293.
- Bundy, McGeorge / Kennan, George F. / McNamara, Robert S. / Smith, Gerard. "Nuclear Weapons and the Atlantic Alliance." *Foreign Affairs*, Vol.60, No.4, (Spring 1982), pp.753-768.
- Burt, Richard. "*New Weapons Technologies. Debate and Directions*". Adelphi-Papers, No.127, London: International Institute for Strategic Studies, Summer 1976.
- Burt, Richard. "The Cruise Missile and Arms Control." *Survival*, Vol.18, No.1, (January/February 1976b), pp.10-16.

- Burt, Richard. "The SS-20 and the Eurostrategic balance." *The World Today*, Vol.33, No.2, (February 1977), pp.43-51.
- Burt, Richard. "Technological Change and Arms Control: The Cruise Missile Case." in: *Holst/Nerlich (1977a)*, pp.179-191
- Burt, Richard. "The Scope and Limits of SALT." *Foreign Affairs*, Vol.56, No.4, (July 1978), pp.751-769.
- Burt, Richard. "West is considering missile for Europe able to hit Soviet Union". *New York Times* (January 20, 1979).
- Burt, Richard. "Washington and the Atlantic Alliance: The Hidden Crisis.." in: *W. Scott Thompson (ed.)*, 1980, pp.109-121.
- Burt, Richard (ed.). *Arms Control and Defense Postures in the 1980s*. Boulder/Colorado: Westview Press, London: Croom Helm, 1982.
- Buteux, Paul. "Theatre Nuclear Weapons and European Security". *Canadian Journal of Political Science*, Vol X:4 (December 1977) pp.781-808.
- Buteux, Paul. *The Politics of Nuclear Consultation in NATO 1965-1980*. Cambridge, London, New York, New Rochelle, Melbourne, Sydney: Cambridge University Press, 1983.
- Buteux, Paul. *Strategy, Doctrine, and the Politics of Alliance. Theatre Nuclear Force Modernisation in NATO*. Boulder, Colorado: Westview Press, 1983a.
- Butterwege, Christoph / Hofschien, Heinz-Gerd. *Sozialdemokratie und Frieden*. Heilbronn: 1984
- Calleo, David P.. *Beyond American Hegemony, The Future of the Western Alliance*. New York: Basic Books, 1987.
- Carter, Jimmy. *Keeping faith*. London /Glasgow /Sydney /Auckland /Toronto /Johannesburg: William Collins, 1982.
- Cartwright, John / Critchley, Julian. *Cruise, Pershing and the SS-20. The Search for Consensus: Nuclear Weapons in Europe*. London, Oxford, Washington D.C., New York, Toronto, Sydney, Frankfurt: Brassey's Defense Publishers, A North Atlantic Assembly Report, 1985.
- Charles, Daniel. *Nuclear Planning in NATO. Pitfalls of First Use*. Cambridge, MA: Ballinger, 1987.
- Cleave, William R. Van / Cohen, S. T.. *Tactical Nuclear Weapons: An Examination of The Issues*. New York: Crane, Russak, 1978.
- Cochran, Thomas B./ Arkin, William M./ Hoening, Milton M.. *Nuclear Weapons Databook. U.S. Nuclear Forces and Capabilities, Vol 1*. Cambridge, Massachusetts: Ballinger, 1984.
- Cohen, S.T.. *The Neutron Bomb: Political, Technological and Military Issues*. Cambridge, Massachusetts and Washington: Institute for Foreign Policy Analysis, November 1978.

- Conrow, E.H. / Smith, G.K. / Barbour, A.A.. *The Joint Cruise Missiles Project: An Acquisition History*. Prepared for the Joint Cruise Missile Project Office. Santa Monica, California: RAND Corporation, August 1982.
- Cordesman, Anthony H.. *"Deterrence in the 1980s: Part I . American Strategic Forces and Extended Deterrence"*, Adelphi-Papers No.175. London: The International Institute for Strategic Studies, Summer 1982.
- Cotter, Donald R.. "NATO Theater Nuclear Forces: An Enveloping Military Concept." *Strategic Review*, Vol.9, No.2, (1981), pp.44-53.
- Cotter, Donald R. / Hansen, James H. / Mc Connel, Kirk. Pro Pace 1983, *Beiträge und Analysen zur Sicherheitspolitik. Das nukleare Kräfteverhältnis in Europa. Stand, Entwicklungen, Folgerungen. Deutsche Ausgabe des United States Strategic Institute, Washington D.C..* Bonn: Deutsches Strategieforum, July 1983.
- Cotter, Donald R. *"New Conventional Force Technology and the NATO-Warsaw Pact Balance Part II"*, Adelphi Papers, No.198. London: The International Institute for Strategic Studies, Summer 1985.
- Czempiel, Ernst-Otto. "Deutschland-USA: Kooperation und Irritationen." *Außenpolitik*, Vol.33, No.1, (1982), pp.14-29.
- Czempiel, Ernst-Otto. "Konventionell oder nuklear? Langfristige Aspekte der aktuellen Debatte." *Die Neue Gesellschaft*, Vol.30, No.2, (February, 1983) pp.150-154.
- Daalder, Ivo H.. "NATO Nuclear Targeting after INF", *The Journal of Strategie Studies*, Vol.11, No.3, (September 1988), pp.265-291.
- Datenhandbuch zur Geschichte des Deutschen Bundestages 1949-1982*, Baden-Baden: Nomos, 1984.
- Davidson, Charles N. Dr.. "Tactical Nuclear Defense, The West German View." *Parameters*, Vol.4, (1974), pp.47-57.
- Davis, Lynn Etheridge. *"Limited Nuclear Options. Deterrence and the New American Doctrine"*. Adelphi-Papers, No.121. London: International Institute for Strategic Studies, Winter 1975/76.
- De Maiziere, Ulrich. *Führen im Frieden. 20 Jahre Dienst für Bundeswehr und Staat*. München: Bernard & Graefe 1974.
- Denso, Jochen. *Schale ohne Kern- auch die Nachrüstung kann das Dilemma der NATO nicht lösen*. Koblenz: Bernhard und Gräfe, 1983.
- Die Grünen, *Schlachtfeld Europa*. Stuttgart: Die Grünen, 1981.
- Discriminate Deterrence. *Report of the Commission on Integrated Long-Term Strategy*. Washington D.C.: U.S. Government Printing Office, January 1988.
- Dräcker, F. Helmut. *Warum die Friedensbewegung scheitern mußte. Gedanken zu den deutsch-amerikanischen Beziehungen 1980-1984*. Frankfurt am Main: Sendler Verlag, 1985.
- Eberwein, Wolf Dieter / Kelleher, Catherine. *Sicherheit, zu welchem Preis? - Die Zukunft der westlichen Allianz*. München/Wien: Olzog Verlag, 1983.

- Elliot, David C.. *Decision at Brussels: The Politics of Nuclear Forces*. Santa Monica: California Seminar on International Security and Foreign Policy, Discussion Paper No. 97, August 1981.
- Enders, Thomas. *Franz Josef Strauß - Helmut Schmidt und die Doktrin der Abschreckung*. Koblenz: Bernard and Graefe, 1984.
- Enthoven, Alain C.. "U.S. Forces in Europe: How many? Doing what?." *Foreign Affairs*, Vol.53, No.3, April, (1975) pp.513-532.
- Eppler, Erhard. *Die tödliche Utopie der Sicherheit*. Reinbek bei Hamburg: Rowohlt, 1983.
- Ermath, Fritz W.. "Contrasts in American and Soviet Strategic Thought." *International Security*, Vol.3, No.2, (Fall 1978), pp.138-155.
- Facer, Roger L.L.. *Conventional Forces and the NATO Strategy of Flexible Response. Issues and Approaches*. Santa Monica: RAND Corporation, January 1985.
- Federal Government. "Answer of the Federal Government to the parliamentary questions of the SPD/FDP and CDU/CSU on February 16, 1970." *Bundesdrucksache* 8/2587, pp.20-23.
- Feiveson, Harold A., "The Dilemma of Theater Nuclear Weapons" *World Politics*, Vol.33, No.1, (Oct. 1980), pp. 282-298.
- Fesefeldt, Joachim D.C.. *Die nukleare Schwelle. Mythos oder Wirklichkeit?*. Herford und Bonn: Mittler und Sohn, 1984.
- Forndran, Erhard / Krell, Gert. *Kernwaffen im Ost-West-Vergleich. Zur Beurteilung militärischer Potentiale und Fähigkeiten*. Baden-Baden: Nomos, 1984.
- Freedman, Lawrence. *The evolution of nuclear strategy*. London and Basingstoke: Macmillan Press, 1981.
- Freedman, Lawrence. "NATO Myths." *Foreign Policy*, (Winter, 1981/82), pp.48-69.
- Frye, Alton. "Nuclear Weapons in Europe: No Exit from Ambivalence." *Survival*, Vol.22, No.3, (May/June 1980), pp.98-106.
- Friedberg, Aaron L.. "A History of the U.S. Strategic 'Doctrine' - 1945-1980." *Journal of Strategic Studies*, Vol.3, No.3, (December, 1980), pp.37-71.
- Friedensanalysen. Für Theorie und Praxis 2. Schwerpunkt: Rüstung*. Frankfurt am Main: Suhrkamp Verlag, 1981
- Galen, Justin. "NATO's Theater Nuclear Dilemma: A new Set of Crucial Choices." *Armed forces Journal International*, (January, 1979), pp.16-23.
- Garthoff, Raymond L.. "The NATO Decision on Theater Nuclear Forces." *Political Science Quarterly*, Vol.98, No.2, (Summer 1983), pp.197-214.
- Garthoff, Raymond L.. "The Soviet SS-20 Decision." *Survival*, Vol.25, No.3, (May/June 1983a), pp.110-119.

- Garthoff, Raymond L.. "Moscow's Less Than Ominous Reasons for Deploying SS-20's" in *New York Times*, May 13, 1983b, p.30
- Garthoff, Raymond L.. *Detente and Confrontation. American Soviet Relations from Nixon to Reagan*, Washington, D.C.: The Brookings Institution, 1985.
- Gasteyger, Curt. *Searching for World Security. Understanding Global Armament and Disarmament*. London: Frances Pinter, 1985.
- Gelb, Leslie H.. "Reagan orders production of 2 types of neutron arms for stockpiling in the U.S.", *New York Times*, August 9, 1981.
- Gelb, Leslie. "The Little Missile That Could and Therefore is". *New York Times Magazine*, August 30, 1981a.
- German-American Roundtable (Fourth) on NATO: *NATO Modernization and European Security, A Conference Report, Held in Bonn, FRG, December, 12-13, 1980*. Cambridge, Massachusetts: Institute for Foreign Policy Analysis, 1981.
- Getler, Michael. "US. Marshalling Detailed Figures to back views of Soviet Strength". *International Herald Tribune*, November 23, 1981.
- Gillessen, Günther. "Über den Umgang mit Planungsstäben und Gedanken-Fabriken". *Frankfurter Allgemeine Zeitung*, (January 10, 1988, supplement No. 8)
- Glaser, Harald / Horch, Hans. *Neue Waffen, alte Ordnung, Ziele und Hintergründe der "Nach"rüstung*. Stuttgart: Alektor Verlag, 1983.
- Goodpaster, Andrew. "NATO Strategy and Requirements 1975-1985." *Survival*, Vol.17, No.5, (Sept./October 1975), pp.210-216.
- Gray, Colin S.. "Mini-nukes and strategy." *International Journal*, Vol.29, No.2, (1974a), pp.216-241.
- Gray, Colin S.. "Theater Nuclear Weapons. Doctrines and Postures." *World Politics*, Vol.28, No.2, (January 1976), pp.300-314.
- Gray, Colin S. "Nuclear Strategy: the Case for a Theory of Victory" in: *Steven E. Miller, 1984*, pp.23-56
- Gray, Colin S. / Payne, Keith. "Victory is possible." *Foreign Policy*, (Summer, 1980), pp.14-27.
- Green, Philip. *Deadly Logic. The Theory of Nuclear Deterrence*. New York: Schocken Books, 1968.
- Groth, Michael. "Unabhängig, doch weit ab von der Macht. Die 'Stiftung Wissenschaft und Politik'". *Frankfurter Allgemeine Zeitung* (April, 21, 1987)
- Guha, Anton-Andreas. *Der Tod in der Grauzone. Ist Europa noch zu verteidigen?* Frankfurt am Main: Fischer Verlag, 1980.
- Gumbert, Michael / Stuckenbrock, Reimar. "Die herrschende Sicherheitspolitik in der Sackgasse: Warum Nuklearrüstung als Politikersatz scheitern muß." in: *Albrecht et al.(eds.)*, 1983, pp.10-53.

- Haftendorn, Helga. *Abrüstungs- und Entspannungspolitik zwischen Sicherheitsbefriedigung und Friedenssicherung. Zur Außenpolitik der BRD 1955-1973*. Düsseldorf: Bertelsmann Universitätsverlag, 1974.
- Haftendorn, H./ Karl, W.D./ Krause, J./ Wilker, L. (eds.), *Verwaltete Außenpolitik. Sicherheits- und entspannungspolitische Entscheidungsprozesse in Bonn*. Köln: Verlag Wissenschaft und Politik: Berend von Nottbeck, 1978
- Haftendorn, Helga. "Das außen- und sicherheitspolitische Entscheidungssystem der Bundesrepublik Deutschland." *Aus Politik und Zeitgeschichte*, B43/83, (October 29., 1983), pp.3-15
- Haftendorn, Helga. "Das Doppelte Missverständnis. Zur Vorgeschichte des NATO-Doppelbeschlusses von 1979." *Aus Politik und Zeitgeschichte*, Vol.33, No.2, (1985), pp.244-287.
- Haftendorn, Helga. *Sicherheit und Stabilität. Außenbeziehungen der Bundesrepublik zwischen Ölkrise und NATO-Doppelbeschluß*. München: Deutscher Taschenbuch Verlag, 1986
- Haftendorn, Helga. "Transatlantische Dissonanzen. Der Bericht über 'Selektive Abschreckung' und die Strategiediskussion in den USA." *Europa-Archiv*, No.8, (April 1988), pp.213-222.
- Halperin, Morton H.. "NATO and the TNF Controversy." *Orbis*, Vol.26, No.1, (Spring 1962), pp.105-116.
- Hassel, Kai-Uwe von. "The Search for Consensus. Organizing Western Defense." *Foreign Affairs*, Vol.43, No.2, (January 1965), pp.209-216.
- Head, Richard G./ Rokke, Ervin J.. *American Defense Policy Third Edition*. Baltimore and London: The John Hopkins University Press, 1973
- Heisenberg, Wolfgang . *The Alliance and Europe: Part I: Crisis Stability in Europe and Theater Nuclear Weapons, Adelphi-Papers, No.96*. London: The International Institute for Strategic Studies, Summer 1973.
- Herrmann, Rene. *Zur Rede Verteidigungsminister Schlesingers am 10. Januar 1974*. Ebenhausen: Stiftung Wissenschaft und Politik, SWP-AP 2025, January 1974.
- Higgins Michel / Makins, Christopher J.. "Theater Nuclear Forces and 'Grey Area' Arms Control." in: *Burt*, 1982, pp.75-96.
- Hoag, Malcom W.. *Forward-Based Nuclear Systems in NATO in Historical Perspective. Lessons for SALT III. P-6426* Santa Monica, California: Rand Corporation, May 1980.
- Hoffmann, Hubertus. *Atomkrieg-Atomfrieden. Technik, Strategie, Abrüstung*. München:, Bernard & Graefe, 1980.
- Hoffmann, Hubertus. *Die Atompartner Washington-Bonn und die Modernisierung der taktischen Kernwaffen. Vorgeschichte und Management der Neutronenwaffe und des Doppelbeschlusses der NATO*. Koblenz: Bernard & Graefe, 1986.
- Hoffmann, Stanley. "NATO and Nuclear Weapons: Reasons and Unreason." *Foreign Affairs* Vol.60, No.2, (Winter 1981/82), pp.327-346

- Holst, Johan J. / Nerlich, Uwe (eds.). *Beyond nuclear Deterrence. New aims. New Arms*. New York: Crane, Russak and Company, 1977.
- Holst, Johan J.. "Nukleare Mittelstreckenwaffen und das politische Gleichgewicht in Europa." *Europa-Archiv*, Vol. 38, No.17, (1983), pp.507-516.
- Holst, Johan J. "Strength with clarity", *Time*, June 29, 1984.
- Hudson, Cecil I. / Haas, Peter H.. "New Technology: The Prospects." in: *Holst/Nerlich* (eds.), 1977, pp.107-148.
- Hughes, Philip G.. "Cutting the Gordian Knot: a Theater - Nuclear Force for Deterrence in Europe." *Orbis*, Vol.22, No.2, (1978), pp.309-332.
- Ikle, Charles Fred. "Can Nuclear Deterrence Last Out The Century?." *Foreign Affairs*, (January, 1973), pp.267-285.
- Ikle, Charles Fred. "NATO's 'First Nuclear Use': A Deepening Trap?." *Strategic Review*, Vol.8, No.1, (1980), pp.18-23.
- INF-Treaty*. USIS Wireless File, Embassy of the United States of America, Brussels, December 8, 1987, cited as INF-Treaty.
- International Institute for Strategic Studies (IISS). *The Military Balance 1979-1980*. London: IISS, 1980.
- Joffe, Josef. "Why Germans Support SALT." *Survival*, Vol.21, No.5, Sept-Oct., (1979), pp.209-212.
- Joffe, Josef. "Von der Nachrüstung zur Null-Rüstung. Die Geschichte des Doppelbeschlusses. Innenpolitik war wichtiger als Militärstrategie," *Die Zeit*, November 27, 1981a.
- Joffe, Josef. "Weltweit anerkannte Forschungsstätte. Die Stiftung Wissenschaft und Politik feiert ihr 25jähriges Bestehen". *Süddeutsche Zeitung*, (October 3, 1987).
- Kageneck, Graf August. "Freude auch an der Seine". *Die Welt* (November 25, 1980).
- Kahn, Herman. *On Escalation. Metaphors and Scenarios*. London: Pall Mall Press, 1965.
- Kaiser, Karl. "The Great Nuclear Debate: German-American Disagreements." *Foreign Policy*, (Spring, 1987), pp.83-110.
- Kaiser, Karl and Kreis, Karl Markus (eds.). *Sicherheitspolitik von neuen Aufgaben*. Frankfurt: Metzner Verlag, 1977.
- Kaiser, Karl / Leber, Georg / Mertes, Alois / Schulze, Franz-Josef. "Nuclear Weapons and the Preservation of Peace." *Foreign Affairs*, Vol.60, No.5, (Summer 1982), pp.1157-1170.
- Kaplan, Fred. Warring over new Missiles for NATO. *New York Times Magazine*, December 9, (1979), pp.46-90.
- Kaplan, Fred. *The Wizards of Armageddon. This is their untold story*. New York: Simon and Schuster, 1983.



- Karlsson, Kakan. *SALT I: Förenta staternas och Sovietunionens beteende i de första förhandlingarna om begränsning av strategiska vapen*. Linköping, Sweden: Department of Social Science, Linköping University, 1979.
- Kaufmann, William W.. *The McNamara Strategy*. New York, Evanston and London: Harper and Row, Publishers, 1964.
- Kaufmann, William W.. "Nuclear Deterrence in Central Europa", in *Steinbruner et al. (eds.)*, 1983.
- Kelleher, Catherine McArdle. *Germany and the Politics of Nuclear Weapons*. New York, London: Columbia Press, 1975.
- Keohane, Robert O. *After Hegemony, Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press, 1984.
- Kielsmannsegg, Johan Adolf Graf. *Probleme eines kriegerischen Konflikts, insbesondere in Mitteleuropa*. in Kaiser/Kreis (eds.), 1977.
- Kissinger, Henry A.. *The Necessity for Choice. Prospects of American Foreign Policy*. New York: Harper and Brothers, 1960.
- Kissinger, Henry A.. *The Troubled Partnership. A Re-appraisal of the Atlantic Alliance*. New York / London / Toronto : McGraw-Hill, 1965.
- Kissinger, Henry A.. *The White House Years*. London: Weidenfeld and Nicolson and Michael Josef, 1979.
- Kissinger, Henry A.. *Welt am Sonntag*, Oktober 1, 1982, p.4
- Kissinger, Henry A.. *Nuclear Weapons and Foreign Policy*. Boulder, Colorado: Westview Press, first published in 1957, 1984.
- Knorr, Klaus (ed.). *NATO and American Security*. Princeton: Princeton University Press, 1959.
- Knorr, Klaus and Read, Thornton (eds). *Limited Strategic War*. New York: Praeger, 1962.
- Koch, Peter. *Wahnsinn Rüstung. Ist der 3. Weltkrieg zu vermeiden?* Hamburg: Gruner und Jahr AG & Co, 1981.
- Kohl, Helmut. Speech in the German Bundestag, April 13, 1978. *PIPr* 8/83, pp. 6504-6511.
- Kolmar, Christine. *Sicherheitspolitik und Öffentlichkeit. Eine Inhaltsanalyse am Beispiel der Berichterstattung über die Einführung neuer Mittelstreckenraketen (LRTNF) in Europa*. Dissertation am Fachbereich Kommunikationswissenschaften der Freien Universität Berlin, 1982.
- Kolodziej, Edward A.. "Military Policy: The Use, Threat, and Control of Force." in: *Nagel*, 1983, pp.299-330.
- Krause, Christian. *Kann die NATO auf den Erstgebrauch von Atomwaffen verzichten? Anmerkungen zur sicherheitspolitischen Debatte in der Bundesrepublik und in den USA*. Bonn: Friedrich-Ebert-Stiftung, November 1985.

- Krell, Gert. *Plädoyer für Rüstungskontrolle. Zur Kontroverse um die 'Nachrüstung'*. Frankfurt: Hessische Stiftung Friedens- und Konfliktforschung, HSFK-Report, September 1981.
- Krell, Gert. *Die Diskussion über die Modernisierung der Mittelstreckenwaffen*. Frankfurt: Hessische Stiftung Friedens- und Konfliktforschung, September 1981a.
- Krell, Gert. "Rüstungswettlauf: Verteidigung oder Eigendynamik? Zur Kritik der amerikanischen Nuklearstrategie". in *Friedensanalysen*, 1981b, pp.54-85.
- Krell, Gert / Schlotter, Peter. *Zur Diskussion über die taktischen Nuklearwaffen in Europa. Analyse und Dokumentation*. Frankfurt: Hessische Stiftung Friedens- und Konfliktforschung, HSFK-Report 2/1977.
- Krell, Gert / Schmidt, Hans-Joachim. *Der Rüstungswettlauf in Europa. Mittelstreckensysteme, konventionelle Waffen, Rüstungskontrolle*. Frankfurt: Campus, 1982.
- Krippendorff, Ekkehart, "Die Friedensbewegung kann nicht Friedensbewegung bleiben oder sie ist auch das nicht mehr" in: *Albrecht, et.al. (eds.)* 1983, pp.122-129.
- Lambeth, Benjamin S.. *Selective Nuclear Options in American and Soviet Strategic Policy*. Rand Report, R-2034-DDRE. Santa Monica, California: RAND Corporation, December, 1976.
- Lang, Susanne. *Abschreckungstheorie - Analyse und Kritik ausgewählter theoretisch-begrifflicher Grundkonzepte*, Hamburg: Diplomarbeit, Dezember 1988.
- Lauk, Kurt J.. *Die nuklearen Optionen der Bundesrepublik Deutschland*. Berlin: Duncker and Humblot, 1979.
- Leber, Georg. Interview in: *Der Spiegel*, Vol. 29, No.38, September 15, 1975.
- Leber, Georg. "Speech in the Bundestag September 8, 1977." *PIPr* 8/39, pp.3006-3012.
- Leber, Georg. *Vom Frieden*. Stuttgart: Seewald, 1979.
- Legge, J. Michael. *Theater Nuclear Weapons and the NATO Strategy of Flexible Response*. Santa Monica, California: RAND Corporation, April 1983.
- Lehman, John F. Jr. / Weiss, Seymour. *Beyond the SALT II Failure*. New York: Praeger, 1981.
- Leitenberg, Milton. "Background materials in tactical nuclear weapons (primarily in the European context)." in: *SIPRI* 1978, pp.3-136.
- Leitenberg, Milton. *Rüstung und Sicherheitspolitik. Sechs Studien über verhängnisvolle Entscheidungen*. Baden-Baden: Nomos, 1986.
- Lewis, Kevin N.. "Intermediate-Range Nuclear Weapons." *Scientific American*, Vol.243, No.6, December, 1980, pp.41-51.
- Lider, Julian. *Military Theorie. Concept, structure, problems*. Aldershot: Gower Publishing company, 1983.

- Lodgaard, Sverre. "Long-range Theater Nuclear Forces." in: *SIPRI Yearbook*, 1983, pp.3-25.
- Lodgaard, Sverre and Blackaby, Frank. "Nuclear Weapons" in *SIPRI* 1984, pp.23-47
- Lohmar, Ulrich. *Wissenschaftsförderung und Politikberatung*. Bielefeld: Bertelsmann Universitätsverlag, 1968.
- Lübkermeier, Eckhard. *PD 59 und LRTNF - Modernisierung: Militärstrategische und Sicherheitspolitische Implikationen der Erweiterten Abschreckung für die Bundesrepublik Deutschland*. Bonn: Friedrich-Ebert Stiftung, September 1981.
- Lunn, Simon. "At issue: nuclear modernization in Europe." *The Bulletin of Atomic Scientists*, Vol.38, August/September, (1982), pp.17-23
- Lutz, Dieter S.. *Weltkrieg wider Willen? Die Nuklearwaffen in und für Europa*. Reinbek bei Hamburg: Rowohlt, 1981.
- Lutz, Dieter S.. "Genfer Perspektiven - ein Weltkrieg wider Willen". *Frankfurter Rundschau*, August 22, 1983, p.12
- Lutz, Dieter S.. "Friedens- und Konfliktforschung." in: Dieter S. Lutz (ed.), *Lexikon Rüstung, Frieden, Sicherheit*. München: C.H. Beck, 1987, pp.124-130
- Magenheimer, Heinz. *Die Verteidigung Westeuropas. Doktrin, Kräftestand, Einsatzplanung. Eine Bestandsaufnahme aus Sicht der NATO*. Koblenz: Bernhard und Gräfe, 1986.
- Maier, Jürgen. "Der Atomkrieg rückt näher." in: *Die Grünen*, 1981.
- Makins, Christopher J.. "TNF Modernization and 'Countervailing Strategy'." *Survival*, Vol.23, No.4, (July/August 1981), pp.157-164.
- Mahncke, Dieter. *Nukeare Mitwirkung. Die Bundesrepublik Deutschland in der atlantischen Allianz 1954-1970*. Berlin und New York: Walter de Gruyter 1972.
- Martin, Laurence "Flexibility in Tactical Nuclear response" in: *Holst/Nerlich (eds.)*, 1977
- Martin, Laurence. "Theatre Nuclear Weapons and Europe." *Survival*, Vol. 16, No. 6 (Nov., Dec. 1974), pp.268-276.
- Massarrat, Mohssen. *Kriegsgefahr und Friedensbewegung*. Kassel-Bettenhausen: Weber, Zucht & Co., 1984.
- Mathee, Volker. *Die Neutronenwaffe zwischen Bündnis und Innenpolitik. Eine Studie über die Verknüpfung nationaler und allianzinterner Willensbildungsprozesse*. Herford und Bonn: Mittler, 1985.
- McNamara, Robert S.. "The Military Role of Nuclear Weapons: Perceptions and Misperceptions." *Foreign Affairs*, Vol.62, No.1 (Fall, 1983), pp.59-80.
- McNamara, Robert S.. *The Essence of Security. Reflections in Office*. London: Hodder and Stoughton, 1968.

- McNaugher, Thomas L. / Parker, Theodore M.. *Modernizing NATO's Long-Range Theater Nuclear forces: An Assessment*, Rand Report P-6486. Santa Monica, California: RAND-Corporation, October 1980.
- Mechtersheimer, Alfred. "Atomarer selbstmord auf umwegen", interview in *Stern*, March 26, (1981)
- Mechtersheimer, Alfred. *Zeitbombe NATO. Auswirkungen der neuen Strategie*, . Köln: Eugen Diederichs Verlag, 1984.
- Mechtersheimer, Alfred. "Ist die Pershing II eine Erstschlagwaffe oder nicht?." *Mediatus*, Special Issue, (Februar, 1984a), p.5.
- Meier, Ernst-Christoph. *Deutsch-amerikanische Sicherheitsbeziehungen und der NATO-Doppelbeschluß: die Auswirkungen NATO-interner Interessendivergenzen auf die Nuklearpolitik der Bündnisses. (I, II)*. Rheinfelden: Schäuble Verlag, 1986.
- Memorandum Of Understanding Regarding The Establishment Of The Data Base For The Treaty Between The United States Of America and the Union Of Soviet Socialist Republics On The Elimination Of Their Intermediate Range And Shorter-Range missiles*. USIS Wireless File, Embassy of the United States of America, Brussels, December 8, 1987.
- Miller, Steven E. (ed.). *Strategy and Nuclear Deterrence*. Princeton, New Jersey: Princeton University Press, 1984
- Moltmann, Bernhard. *Perspektiven der Friedensforschung*. Bonn: Information Unit Peace Research Bonn, December 1987.
- Moore, Robert A. "Taktisches Kernwaffenpotential. Gedanken zum Udenkbaren", *Internationale Wehrrevue*, No.4, (1981), pp.401-408.
- Morgan, Roger. *The United States and West Germany, 1945-73. A Study in Alliance Politics*. London: Oxford University Press, 1974.
- Mutz, Reinhard. *Sicherheitspolitik und demokratische Öffentlichkeit in der BRD. Probleme der Analyse, Kritik und Kontrolle militärrer Macht*. München, Wien: R. Oldenbourg Verlag, 1978.
- Mutz, Reinhard (ed). *Die Wiener Verhandlungen über Truppenreduzierungen in Mitteleuropa (MBFR). Chronik, Glossar, Dokumentation, Bibliographie, 1973-1982*. Baden-Baden: Nomos, 1983.
- Mutz, Reinhard. "Das Sicherheitsproblem der Bundesrepublik und die Bundesrepublik als Sicherheitsproblem." in: *Eberwein / Kelleher, 1983a*, pp.75-102.
- Nagel, Stuart (ed), *Encyclopedia of Policy Studies*. New York/Basel 1983.
- NATO. *Texts of Final Comuniques 1949-1974*. Vol.I. Brusseles: NATO Information Service.
- NATO. *Texts of Final Communiques. 1975-80*. Vol.II. Brusseles: NATO Information Service.
- NATO. *Facts and Figures*. Brusseles: NATO Information Service 1981.

- Nerlich, Uwe. "Die nuklearen Dilemmas der Bundesrepublik Deutschland" *Europa-Archiv*, No.17, 1965, pp.637-652.
- Nerlich, Uwe. *The Alliance in Europe. Part V. Nuclear Weapons and East West Negotiations*. Adelphi-Paper, No. 120 London: International Institute for Strategic Studies, Winter 1975/76.
- Nerlich, Uwe. *Die Verbesserung der nuklearen Fähigkeiten der NATO: Verteidigungs- und verhandlungspolitische Probleme*, SWP-AP 2159. Ebenhausen: Stiftung Wissenschaft und Politik, January 1978.
- Nerlich, Uwe. "Theater Nuclear Forces in Europe. Is NATO Running out of options ?." *The Washington Quarterly*, Vol.3, No.1, (Winter, 1980), pp.100-125.
- Nerlich, Uwe. "Die Stationierung landgestützter Mittelstreckenwaffen in Europa. Zur Begründung der Einführung landgestützter LRTNF." *Europäische Wehrkunde*, Vol.30, No.8, (1981), pp.337-341.
- Nerlich, Uwe / Bomsdorf, Falk (eds.). *Sowjetische Macht und westliche Verhandlungspolitik im Wandel militärischer Kräfteverhältnisse*. Baden-Baden: Nomos Verlag, 1982.
- Nerlich, Uwe. "Warum Mittelstreckenwaffen? Optionen der NATO: Erfordernisse und Beschränkungen." in: *Pro Pace. Deutsches Strategie-Forum, Streit um den Frieden. Bemerkungen und Meinungen zum Doppelbeschluß der NATO*. Bonn: Verlag Mittler & Sohn, 1983. pp.7-15
- Neuman, Hans-Jürgen. *Kernwaffen in Europa. NATO- Doppelbeschluß. Rüstungskontrolle Glossar*. Bonn: Osang Verlag, 1982.
- Newhouse, John. *Cold Dawn: The Story of SALT*. New York, Chicago, San Francisco: Holt, Rinehart and Winston, 1973.
- Nitze, Paul H.. "The Alastair Buchan Memorial Lecture." *Survival*, Vol.27, No.3,(May/June, 1985), pp.98-107.
- Nitze, Paul H.. "Atoms, Strategy and Policy" *Foreign Affairs*, Vol. 34, (January 1956), pp.187-198
- Osgood, Charles E.. *An Alternative to War or Surrender*. Urbana, Illinois: University of Illinois Press, 1962.
- Osgood, Robert Endicott. *NATO: The Entangling Alliance*. Chicago: University of Chicago Press 1962.
- Osgood, Robert. *Limited War. The Challenge to American Strategy*. Chicago and London: The University of Chicago Press, Fifth Impression 1970, 1957.
- Owen, Jörg. *Maritime Aspekte der Sicherheit, unpublished manuscript*. Hamburg: Institut für Friedensforschung und Sicherheitspolitik (IFSH), 1988.
- Paine, Christopher. "Pershing II: the Army's strategic weapon." *Bulletin of the Atomic Scientist*, (October, 1980), pp.25-31.
- Parteitag der Sozialdemokratischen Partei Deutschlands 15 bis 19 November 1977. *Protokoll der Verhandlungen. Anlagen*.

- Perdelwitz, Wolf / Bremer, Heiner. *Geisel Europa*. Berlin: Olle und Wolter, 1981.
- Pierre, Andrew J.. "Can Europe's Security be 'decoupled' from America?." *Foreign Affairs*, Vol.51, No.4, (July, 1973), pp.761-777.
- Pincus, Walter. "Neutron Bomber Warhead Buried in ERDA Budget". *The Washington Post*, June 6, 1977.
- Pincus, Walter. "Pershings Packed to Go", *The Washington Post*, October 16. 1983
- Pincus, Walter. "Pershing II's Deployed Faster Than Expected", *The Washington Post*, October 8. 1984
- Potyka, Christian. "Doppelstrategie mit Raketen". *Süddeutsche Zeitung*, November 16, 1979, p.4.
- Potyka, Christian. "Zwischen zwei Alpträumen. Europäische Zweifel an der US-Strategie der atomaren Abschreckung" *Süddeutsche Zeitung*, May 23/24, 1981, p.8
- Pringle, Peter / Arkin, William. *SIOP. Nuclear War from the Inside*. London: Sphere Books Ltd., 1983.
- Rapoport, Anatol. *Strategy and Conscience*. New York: Schocken Books, 1964.
- Rattiger, Hans. "Militärdoktrinen." in: Zoll, Ralf / Lippert, Ekkehart / Rössler, Tjarck, *Bundeswehr und Gesellschaft. Ein Wörterbuch*. Opladen: Westdeutscher Verlag, 1977, pp.164-169.
- Ravenal, Earl C.. "Europe without America: The Erosion of NATO." *Foreign Affairs*, (Summer, 1985), pp.1020-1035.
- Read, Thornton. "Limited Strategic War and Tactical Nuclear War." in: Knorr / Read (eds.), 1962, pp.67-116.
- Record, Jeffrey. *U.S. Nuclear Weapons in Europe. Issues and Alternatives*. Washington, D.C.: Brookings Institution, 1974.
- Record, Jeffrey. *Nato's Theater Nuclear Force Modernization Program: The Real Issues*. Cambridge, Massachusetts and Washington D.C.: Institute For Foreign Policy Analysis, November 1981.
- Richardson, James L.. *Germany and the Atlantic Alliance. The Interaction of Strategy and Politics*. Cambridge: Harvard University Press, 1966.
- Richter, Wolf. *Neutronenwaffe - "Perversion des Denkens?" Zur Kontroverse um atomare Gefechtsfeldwaffen in Europa und ihre Bedeutung für die NATO-Strategie*. München: Bernard und Graefe, 1982.
- Risse-Kappen, Thomas. *"Fahrplan zur Abrüstung?" Zur INF-Politik der Bundesrepublik Deutschland 1970-1983*. Frankfurt am Main: Hessische Stiftung Friedens- und Konfliktforschung, January 1985.
- Risse-Kappen, Thomas. *The Zero Option, INF, West Germany, and Arms Control*. Boulder & London: Westview Press, 1988.
- Rose, Francois de. "The Future of SALT and Western Security in Europe." *Foreign Affairs*, Vol.57, No.5, (Summer, 1979), pp.1065-1074.

- Rose, John P.. *The Evolution of U.S. Army Nuclear Doctrine, 1945-1980*. Boulder, Colorado: Westview Press, 1980.
- Rosenberg, D.A.. "The Origins of Overkill. Nuclear Weapons and the American Strategy, 1945-1960." *International Security*, Vol.7, No.4, (1983), pp.3-71.
- Rosenkranz, Erhard / Jütte, Rüdiger. *Abschreckung contra Sicherheit?*. München: R. Piper & Co., 1974.
- Rothenburg, Armin Graf v.. "Der Nukleare Aspekt in der Militärpolitik der NATO." *Wehrkunde*, Vol.21, No.5, (May 1972), pp.225-230.
- Rowen, Henry S. / Wohlstetter, Albert, "Varying Response with Circumstance" in : *Horst / Nerlich 1977*, pp.225-238.
- Ruehl, Lothar. *Machtpolitik und Friedensstrategie*. Hamburg: Hoffmann und Kampe, 1974.
- Ruehl, Lothar. "Der Nutzen militärischer Macht in Europa." in: *Kaiser / Kreis, 1977*, pp.220-272.
- Ruehl, Lothar. "Die Nichtentscheidung über die 'Neutronenwaffe'. Ein Beispiel verfehelter Bündnispolitik." *Europa-Archiv*, No.5, (1979), pp.137-150.
- Ruehl, Lothar. "Der Beschluß der NATO zur Einführung nuklearer Mittelstreckenwaffen." *Europa-Archiv*, No.4, (1980), pp.99-110.
- Ruehl, Lothar. "Belastungen des Amerikanisch-Europäischen Verhältnisses. Die Entscheidung über die Neutronenwaffe." in: *Wagner et.al. 1983*, pp.42-69.
- Ruehl, Lothar. "INF: Threat or Protection." *NATO's Sixteen Nations*, Vol.28, No.8 (December 1983, January 1984), pp.18-24.
- Rühl, Lothar. *Mittelstreckenwaffen in Europa: Ihre Bedeutung in Strategie, Rüstungskontrolle und Bündnispolitik*. Baden-Baden: Nomos, 1987.
- Rühl, Lothar. "The Nuclear Balance in the Central Region and Strategic Stability in Europe." *NATO's Sixteen Nations*, (August, 1987a), pp.18-32.
- Rühl, Lothar. Internal Study. *Stabilität und Konstruktive Beziehungen in Europa. Entwurf eines Konzepts für eine strategisch gedeckte Sicherheitspolitik*. (Bonn: March 17, 1988).
- Russell, Robert W.. "The Atlantic Alliance in Dutch Foreign Policy." *Internationale Spectator*, Vol.23, No.13, (July 8, 1969), pp.1189-1208.
- Schelling, Thomas C.. *The Strategy of Conflict*. Cambridge, Massachusetts: Harvard University, 1960, 4th printing 1970.
- Schelling, Thomas C.. "Comment" in *Knorr and Read, 1962*, pp.241-258
- Schelling, Thomas C.. *Arms and Influence*. New Haven and London: Yale University Press, 1966.
- Schlesinger, James R., Secretary of Defense. *The Theater Nuclear Force Posture in Europe, A Report to the United States Congress in Compliance with Public*

- Law 93-365*. Washington D.C.: U.S.G.P.O., April 1, 1975, quoted as TNF-report 1975.
- Schlesinger, James R.. "Flexible Strategic Options and Deterrence. Excerpts from the Press Conference of US Secretary of Defense James Schlesinger, 10 January 1974." *Survival*, Vol. 16, No.2, (March/April, 1974), pp.86-90.
- Schlesinger, James. "The Eagle and the Bear." *Foreign Affairs*, (Summer, 1985), pp.937.
- Schmidt, Helmut. *Defense or Retaliation. A German Contribution to the consideration of NATO's Strategic Problem*. Edinburgh and London: Oliver and Boyd, 1962.
- Schmidt, Helmut. "Probleme der militärischen Strategie." *Die Neue Gesellschaft*, Vol.12, No.2, (March/April 1965), pp.616-628.
- Schmidt, Helmut. *Strategie des Gleichgewichts. Deutsche Friedenspolitik und die Weltmächte*. Stuttgart: Seewald Verlag, 1969.
- Schmidt, Helmut. Remarks by Chancellor Helmut Schmidt, *Survival*, July/August 1977, pp.177-178.
- Schmidt, Helmut. Bulletin der Bundesregierung, "Rede des Bundeskanzlers vor den Vereinten Nationen". *Bulletin der Bundesregierung*, Bonn: Presse- und Informationsamt der Bundesregierung No.55 (May 30,1978), pp.529-535.
- Schmidt, Helmut. "The 1977 Alastair Buchan Memorial Lecture." *Survival*, (January/February, 1978b), pp.2-13.
- Schmidt, Helmut. Governmental Declaration of Chancellor Schmidt, April 13, 1978. *Bulletin*, No. 34, Bonn: Presse und Informationsamt der Bundesregierung, April 1978c, pp.321-326.
- Schmidt, Helmut. Interview with Helmut Schmidt, "Schmidt's calculabilities", *Economist*, (October 6, 1979) p.49
- Schmidt, Helmut. *Rede vor der Sozialdemokratischen Bundestagsfraktion*, 6. Februar 1979a.
- Schmidt, Helmut. "Meine Sorge ist: kein Stillstand", interview in *Der Spiegel*, Vol.34, No.6, February 4, (1980), pp.24-33.
- Schmidt, Helmut. *Rede auf der Bundesdelegierten-Konferenz und Außenordentlicher Parteitag der SPD, Köln*, 18-19. November 1983, Protokoll, pp.98-118.
- Schmidt, Helmut. Interview: "With Helmut Schmidt" by Craig R. Whitney. *New York Times Magazine* (September 16, 1984) pp.57-130.
- Schmidt, Helmut. Summary of an interview of Helmut Schmidt with Thomas Risse-Kappen, June 11, 1985, *unpublished manuscript*
- Schwartz, David N.. *NATO's Nuclear Dilemma*. Washington: Brookings Institution, 1983.



- Schwartz, David N.. "A Historical Perspective." (1983a) in: *Steinbruner, Sigal, 1983*, pp.5-21.
- Schwarz, Klaus-Dieter (ed.). *Sicherheitspolitik. Analysen zur politischen und militärischen Sicherheit*. Bad Honnef-Erpel: Osang Verlag, 1978(3. Edition).
- Schwarz, Klaus-Dieter / Van Cleave, William R.. "Die Theorie der Abschreckung." in: *Schwarz, 1978a*, pp.131-149
- Seidel, Peter. *Die Diskussion um den Doppelbeschluß. Eine Zwischenbilanz*. München: Bernhard und Graefe, 1982.
- Senghaas, Dieter. *Abschreckung und Frieden. Studien zur Kritik organisierter Friedlosigkeit*. Frankfurt: Fischer Taschenbuch Verlag 1969, 1972.
- Senghaas, Dieter. "Rückblick und Ausblick auf Abschreckungspolitik." in: *Böckle / Krell, 1984*, pp.98-132.
- Senghaas, Dieter. "Noch einmal: Nachdenken über Nachrüstung." *Leviathan*, No.1, (1984a), pp.1-27.
- Senghaas, Dieter. *Die Zukunft Europas, Probleme der Friedensgestaltung*. Frankfurt am Main: Shurkamp Verlag, 1986
- Senghaas, Dieter. "Die Mittelstreckenwaffenproblematik bei Lothar Rühl". *Sicherheit und Frieden*, Vol.5, No. 4, (1987), pp.266-271.
- Sharp, Jane M.O. "Understanding the INF Debacle: Arms Control and Alliance Cohesion." *Arms Control*, Vol.5, No.2, (1984), pp.95-127.
- Sheehan, Michael / Wyllie, James H.. *The Economist Pocket Guide to Defense*. Oxford/London: Blackwell and The Economist 1986.
- Sigal, Leon V.. *Nuclear Forces in Europe. Enduring dilemmas. Present prospects*. Washington D.C.: Brookings Institution, 1984.
- Sinnreich, Richard Hart, "NATO's Doctrinal Dilemma", *Orbis*, No.19, 1975, pp.461-476
- Simon, Ulrich. "Nukleare Mittelstreckenwaffen und Erweiterte Abschreckung. Politisch-psychologische Hintergründe und militärischer Stellenwert des NATO-Rüstungsprogramms." *Politische Vierteljahresschrift*, Vol.26, No.3, (1985), pp.227-246.
- Slocombe, Walter. "The Countervailing Strategy." *International Security*, Vol.5, No.4 (Spring, 1981), pp.18-27.
- Smart, Ian. "Perspectives from Europe." in: *Willrich/Rhineland, 1974*, pp.185-208.
- Smith, G.K. / Barbour, A.A.. *"The Joint Cruise Missile Project: An Acquisition History", Prepared for the Joint Cruise Missile Project Office, Rand Corporation R-3039-JCMPO*. Santa Monica, California: Rand Corporation, August 1982.
- Smith, Jeffrey R.. "Missile Deployments Roil Europe." *Science*, Vol.223, (January, 1984), pp.371-376.

- Snow, Donald M.. *Nuclear Strategy in a Dynamic World. American Policy in the 1980s. Glossary*. Alabama : The University of Alabama Press, 1981.
- Snyder, Glenn H.. "Deterrence by Denial and Punishment" in: *Bobrow (ed.)*, 1965.
- Soell, Hartmut. "Sich barfuß in die Tür der Weltpolitik klemmen?" *Frankfurter Allgemeine Zeitung* (November 12, 1983)
- Sommer, Theo. "The Neutron Bomb. Nuclear war without chaos?." *Survival*, Vol.19, No.6, (Nov./Dec. 1977), pp.263-266.
- Sommer, Theo. "Think-tank's 25 years of 'opening intellectual doors'." *German Tribune*, (October 11, 1987), p.5.
- Sonntag, Philipp. *Verhinderung und Linderung atomarer Katastrophen* . Bonn: Osang Verlag, 1981.
- Steinbruner, John D.. "Nuclear Decapitation." *Foreign Policy*, No.45, (Winter, 1981/82), pp.16-28.
- Steinbruner, John D. / Sigal, Leon V. (eds.). *Alliance Security: NATO and the No-First-Use Question*. Washington: The Brookings Institution, 1983.
- Steinhoff, Johannes . *Wohin treibt die NATO? Probleme der Verteidigung Westeuropas* . Hamburg: Hoffmann und Campe, 1976.
- Stockholm International Peace Research Institute: SIPRI. *Tactical Nuclear Weapons: European Perspectives*. London: Taylor and Francis, 1978.
- Stockholm International Peace Research Institute: SIPRI. *World Armaments and Disarmament. SIPRI Yearbook 1981*. London: Taylor & Francis, 1981.
- Stockholm International Peace Research Institute: SIPRI. *World Armaments and Disarmament. SIPRI Yearbook 1982*. London: Taylor & Francis, 1982.
- Stockholm International Peace Research Institute: SIPRI. *World Armaments and Disarmament. SIPRI Yearbook 1983*. London: Taylor & Francis, 1983.
- Stockholm International Peace Research Institute (SIPRI). *World Armaments and Disarmament. SIPRI Yearbook 1984*. London and Philadelphia: Taylor and Francis, 1984.
- Stratmann, K.- Peter / Hermann, Rene. "Limited Options, Escalation, and the Central Region." in: *Holst / Nerlich (1977)* pp.239-254.
- Stratmann, K.-Peter. *Die Sicherheit des Nato-Abschnitts Mitteleuropa als Strategisches Problem - Untersuchungen zur Glaubwürdigkeit der gegenwärtigen NATO-"Posture"*. München/Ebenhausen: Dissertation, 1978.
- Stratmann, K.-Peter. *NATO-Strategie in der Krise? Militärische Optionen von NATO und Warschauer Pakt in Mitteleuropa*. Baden-Baden: Nomos, 1981.
- Stratmann, K.-Peter. "Das 'eurostrategische' Kräfteverhältnis. Zweifelhafte Bewertungen als Folge der Anwendung unterschiedlicher Kriterien." *Europa-Archiv*, Vol.36, No.13, (1981a), pp.387-398.

- Stratmann, K.-Peter. *Modernisierung und Dislozierung nuklearer Waffen in Europa: Mögliche Funktionen vereinbarter Beschränkungen bei der Stabilisierung der Abschreckung*. Ebenhausen: Stiftung Wissenschaft und Politik SWP-AP 2337, September 1982.
- Stromseth, Jane E.. *The Origins of Flexible Response, NATO's Debate over Strategy in the 1960's*. Oxford, London: MacMillan Press Ltd, 1988.
- Stuckenbrock, Reimar. "Die Fata Morgana des Enthauptungsschlages: eine Gefahr, die nicht existiert." *Frankfurter Hefte*, Vol.39, No.7, (1984), pp.22-31.
- Stützel, Walther. *Politik und Kräfteverhältnis*. Herford: Mittler & Sohn, 1983.
- Süß, Walter. "NATO und Warschauer Pakt zwischen 'Rüstungswahn' und Herrschaftskalkül - Überlegungen zu den 'Exterminismus'-Thesen Thompsons und Bahros." *Prokla, Zeitschrift für politische Ökonomie und sozialistische Politik*, Vol.11, No.4, (1981), pp.5-45.
- Talbott, Strobe. *Endgame. The Inside Story of SALT II*. New York / San Francisco / London: Harper & Row, 1979.
- Talbott, Strobe. *Raketenschach. Ein Bericht, der offenlegt, wie persönliche Konflikte und Machtkämpfe im Weißen Haus die amerikanische Politik beeinflussen und so die gefährliche Krise in den amerikanisch-sowjetischen Beziehungen ausgelöst haben*. München, Zürich: Piper, 1984
- Thompson, W. Scott (ed.). *National Strategy in the 1980s. From Weakness to Strength*. New Brunswick, London: Transaction Books, Institute for Contemporary Studies, San Francisco, California, 1980.
- Thomson, James A.. "The LRTNF decision: evolution of the US theater nuclear policy, 1975-79." *International Affairs*, Vol.60, No.4, (Fall 1984), pp.601-614.
- Treverton, Gregory F.. "Nuclear Weapons and the 'Grey Area'." *Foreign Affairs*, Vol.57, No.5, (1979), pp.1075-1089.
- Treverton, Gregory. *Nuclear Weapons in Europe. Adelphi Papers No. 168*, London: International Institute for Strategic Studies 1981.
- Treverton, Gregory. "Managing NATO's Nuclear Dilemma." *International Security*, Vol.7, No.4, (Spring 1983), pp.93-115.
- US Army. *"Reference Book Conventional-Nuclear Operations", Vol.1*. Fort Leavenworth, Kansas: US Army Command and General Staff College, Reference Book 100-30, Vol.1., Conventional Nuclear Operations, August 6, 1976.
- U.S. Congress. Arms Control and Disarmament Act (ACDA). *Fiscal Year 1982 Arms Control Impact Statements*. Washington D.C.: U.S.G.P.O., February 1981, quoted as: ACDA Statement Fiscal Year 1982.
- U.S. Congress. Arms Control and Disarmament Act (ACDA). *Fiscal Year 1983 Arms Control Impact Statements*. Washington D.C.: U.S.G.P.O., March 1982, quoted as: ACDA Statement Fiscal Year 1983.
- U.S. Congress. Arms Control and Disarmament Act (ACDA). *Fiscal Year 1985 Arms Control Impact Statements*. Washington D.C.: U.S.G.P.O., March 1984.

- U.S. Congress Congressional Budget Office. *Planning U.S. General Purpose Forces: The Theater Nuclear Forces*, Washington D.C.: U.S.G.P.O., January 1977, quoted as: Planning U.S. General Purpose Forces, 1977.
- U.S. Congress Senate. *U.S. Forces in Europe*, Hearings before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, 93rd Congress. Washington D.C.: U.S.G.P.O., July 25 and 27, 1973, quoted as: U.S. Congress Senate, U.S. Forces in Europe, 1973.
- U.S. Congress Senate. *U.S. Security Issues in Europe : Burden sharing and Offset, MBFR and Nuclear Weapons*. A Staff Report prepared for the use of the Subcommittee on U.S. Security agreements and commitments abroad of the Committee on Foreign Relations. Washington D.C.: U.S.G.P.O., December 2, 1973, quoted as: U.S. Senate Report, Security Issues, 1973.
- U.S Congress Senate. *Policy, Troops, and the NATO Alliance*. Report of Senator Sam Nunn to the Committee on Armed Services. Washington D.C.: U.S.G.P.O., April 2, 1974.
- U.S. Congress Senate. *U.S.-U.S.S.R. Strategic Policies*, Hearing before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, 93rd Congress, 2nd Session. Washington D.C.: U.S.G.P.O., March 4, 1974, quoted as: U.S. Congress, Senate, U.S.-U.S.S.R. Strategic Policies, 1974.
- U.S. Congress Senate. *Nuclear Weapons and Foreign Policy*, Hearings before the Subcommittee on U.S. Security Agreements and Committees Abroad, and the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations. 93rd Congress, second Session on U.S. Nuclear Weapons in Europe and U.S.-U.S.S.R. Strategic Doctrines and Policies, Washington D.C.: U.S.G.P.O., March 7, 14, April 4, 1974, quoted as: U.S. Senate Hearings, Nuclear Weapons and Foreign Policy, 1974.
- U.S. Congress Senate. *Briefing on Counterforce Attacks*, Hearing before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, 93rd Congress, Secret Hearing held on September 11, 1974; Washington D.C.: U.S.G.P.O., Sanitized and Made Public on January 10, 1975, quoted as: U.S. Congress Senate, Briefing on Counterforce Attacks, 1975.
- U.S. Congress Senate. *Fiscal Year 1976 and July-September 1976 Transition Period Authorization For Military Procurement, Research and Development, and Active Duty, Selected Reserve, and Civilian Personnel Strengths*. Hearings before the Committee on Armed Service, 94th Congress, First Session on S. 920, Part 5, Manpower. Washington D.C.: U.S.G.P.O., March 6,7,11, 1975, quoted as: U.S. Senate Hearings, Authorization for Military Procurement, 1975.
- U.S. Congress Senate. *Fiscal Year 1978, Authorization for Military Procurement, Research and Development, and Active Duty, Selected Reserve, and Civilian Personnel Strength*, Hearings before the Committee on Armed Services, 95th Congress, First Session on S. 1210, Part 9, Research and Development. Washington D.C.: U.S.G.P.O., March 17,23,29,30,31,1977, quoted as: U.S. Senate Hearings, Authorization for Military Procurement, 1977]
- U.S. Congress Senate. *Military Implications of the Treaty on the Limitation of Strategic Offensive Arms and Protocol Thereto (SALT II Treaty)*. Hearings before the Committee on Armed Services, 96th Congress, First Session, Part I.

Washington : U.S. Government Printing Office, July 23,24,25,26, 1979, quoted as: U.S. Senate Hearings, Military Implications, 1979.

U.S. Congress Senate. *SALT and the NATO Allies*. A Staff Report to the Subcommittee on European Affairs of the Committee on Foreign Relations. Washington D.C.: U.S.G.P.O., October 1979

U.S. Congress House of Representatives. *The Modernization of NATO's Long-Range Theater Nuclear Forces*, Report prepared for the Subcommittee on Europe and the Middle East by the Foreign Affairs and National Defense Division, Congressional Research Service, Library of Congress. Washington D.C.: U.S.G.P.O., December 31, 1980, [in the following: quoted as: U.S. House of Representatives Report, Modernization, 1980.

U.S. Department of Defense (James R. Schlesinger). *Annual Defense Department Report, Fiscal Year 1975*. Washington D.C.: U.S.G.P.O. , March 4, 1974, quoted as: U.S. Department of Defense, Fiscal Year 1975.

U.S. Department of Defense. (James R. Schlesinger). *Annual Defense Department Report. Fiscal Year 1976*. Washington D.C.: U.S.G.P.O. February 5, 1975, quoted as: U.S. Department of Defense, Fiscal Year 1976.

U.S. Department of Defense. (Donald H. Rumsfeld), *Annual Defense Department Report. Fiscal Year 1977*. Washington D.C: U.S.G.P.O., January 27, 1976.

U.S. Department of Defense. (Donald H. Rumsfeld), *Annual Defense Department Report. Fiscal Year 1978*. Washington D.C: U.S.G.P.O., January 17, 1977.

U.S. Department of Defense. (Herold Brown), *Annual Defense Department Report. Fiscal Year 1979*. Washington D.C: U.S.G.P.O., February 2, 1978.

U.S. Department of Defense (Harold Brown). *Annual Defense Department Report. Fiscal Year 1980*. Washington D.C.: U.S.G.P.O., January 25, 1979.

U.S. Department of Defense (Harold Brown). *Annual Defense Department Report. Fiscal Year 1981*. Washington D.C.: U.S.G.P.O., January 29, 1980.

U.S. Department of Defense (Caspar W. Weinberger). *Annual Defense Department Report. Fiscal Year 1983*. Washington D.C.: U.S.G.P.O., February 8, 1982.

U.S. Department of Defense (Caspar W. Weinberger). *Annual Defense Department Report. Fiscal Year 1984*. Washington D.C.: U.S.G.P.O., February, 1983.

U.S. Department of Defense, *Dictionary of Military and Associated Terms*. The Joint Chiefs of Staff, Washington D.C.: U.S.G.P.O., September 3, 1974.

U.S. Department of the Army, Headquarters. *"Operations Field Manual 100-5."*, Washington D.C.: U.S.G.P.O., 20 August 1982.

Vance, Cyrus. *Hard Choices*. New York: Simon & Schuster, 1983.

Van Cleave, William R. / Cohen, S.T.. *Tactical Nuclear Weapons. An examination of the Issues*. New York: Crane Russak, 1978.

Vardamis, Alex A.. "German-American Military Fissures", *Foreign Policy*, Spring 1979, pp.87-106.

- Wagner, Wolfgang / Dönhoff, Marion Gräfin / Fels, Gerhard / Kaiser, Karl / Noack, Paul (eds.). *Die Internationale Politik 1979-1980*. München/Wien: R. Oldenbourg, 1983.
- Watman, Kenneth. "Follow-on Forces Attack (FOFA) and Emerging Technologies." *Military Technology*, No.2, (1986), pp.28-35.
- Wasmuht, Ulrike C.. *Friedensbewegungen der 80er Jahre. Zur Analyse ihrer strukturellen und aktuellen Entstehungsbedingungen in der Bundesrepublik Deutschland und den Vereinigten Staaten von Amerika nach 1945: Ein Vergleich*. Gießen: Focus-Verlag, 1987.
- Weber, Max. *Soziologie. Universalgeschichtliche Analysen. Politik*. Stuttgart: Kröner, 1973.
- Weißbuch 1970. Zur Sicherheit der Bundesrepublik Deutschland und zur Lage der Bundeswehr*. Bundesminister der Verteidigung, Bonn: Presse- und Informationsamt der Bundesregierung, 1970.
- Weißbuch 1971/72. Zur Sicherheit der Bundesrepublik Deutschland und zur Entwicklung der Bundeswehr*. Bundesminister der Verteidigung, Bonn: Presse- und Informationsamt der Bundesregierung, 1971.
- Weißbuch 1975/76. Zur Sicherheit der Bundesrepublik Deutschland und zur Entwicklung der Bundeswehr*. Bundesminister der Verteidigung, Bonn: Presse- und Informationsamt der Bundesregierung, 1976.
- Weißbuch 1979. Zur Sicherheit der Bundesrepublik Deutschland und zur Entwicklung der Bundeswehr*. Bundesminister der Verteidigung, Bonn: Presse- und Informationsamt der Bundesregierung, 1979.
- Weißbuch 1983. Zur Sicherheit der Bundesrepublik Deutschland*. Bonn: Bundesminister der Verteidigung, Presse- und Informationsamt der Bundesregierung, 1983.
- Weißbuch 1985. Zur Lage und Entwicklung der Bundeswehr*. Bundesminister der Verteidigung, Bonn: Presse- und Informationsamt der Bundesregierung, 1985.
- Weisser, Ulrich. *Strategie im Umbruch. Europas Sicherheit und die Supermächte*. Herford: Busse Seewald, 1987.
- Weizsäcker, Carl Friedrich v. (ed.). *Kriegsfolgen und Kriegsverhütung*. München: Carl Hanser Verlag, 1971.
- Wernicke, Dr. Joachim / Schöll, Ingrid, *Die Stationierung von Pershing II- und SS-20 Raketen. Dokumentation im Auftrag von Prof. Dr. Ulrich K. Preuß, Prozeßbevollmächtigter der Fraktion Die Grünen im Bundestag im Organstreitverfahren gegen die Bundesregierung betr. die Stationierung von Pershing II und Cruise Missiles in der B.R.Deutschland*. Berlin/Bonn: Die Grünen im Bundestag, Juli 1984.
- Wettig, Gerhard. "Die militärischen Optionen in Europa." in: *Forndran / Krell*, 1984, pp.117-155.
- White Paper 1979. The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces*, Bonn: Federal Minister of Defence 1979

**White Paper 1983. *The Security of the Federal Republic of Germany*, Bonn: Federal Minister of Defence, 1983**

Wiegele, Thomas C.. "Nuclear Consultation Process in NATO." *Orbis*, Vol.16, (Summer, 1972), pp.462-487.

Willrich, Mason / Rhineland John (eds.), *SALT: The Moscow Agreements and Beyond*. New York: The Free Press, 1974

Wijk, Robert de. *Flexibility in Response? Attempts to construct a plausible strategy for NATO 1959-1989*. Leiden, June 1989.

Wilker, Lothar. *Die Sicherheitspolitik der SPD 1956-1966. Zwischen Wiedervereinigungs- und Bündnisorientierung*. Bonn-Bad Godesberg: Neue Gesellschaft, 1977.

Wolf, Dieter O.A.. "Die Entscheidung über den Einsatz von Nuklearwaffen." *Aus Politik und Zeitgeschichte*, B 18, (May 5, 1979), pp.29-45.

Yost, David. *European Security and the SALT Process*. The Washington Papers, Vol.9, Beverly Hills/London: Sage Publications, 1981.











